**ISHTIP Zoom Event, 4 May 2021**

**‘Patent Capital in the COVID-19 Pandemic’, Hyo Yoon Kang (Kent) in conversation with Javier Lezaun (Oxford) and Mario Biagioli (UCLA)**

**Chair: Prof Eva Hemmungs Wirtén (Linköping University)**

A discussion drawing on Hyo’s recent writing about ‘[Patent Capital in the Covid-19 Pandemic](https://criticallegalthinking.com/2021/02/09/patent-capital-in-the-covid-19-pandemic-critical-intellectual-property-law/)’.

**Eva Hemmungs Wirtén:** [00:00:00] This event is organized jointly by ISHTIP, the International Society for the History and Theory of Intellectual Property and the European Research Council funded project, Patents as Scientific Information, 1895 to 2020 (PASSIM).

My name is Eva Hemmungs Wirtén. I'm Professor of Mediated Culture at Linköping University, Sweden. I'm one of the current directors of ISHTIP and I'm also the project leader of the PASSIM project and chair of this one hour long conversation, which is the second of three conversations in the ISHTIP/PASSIM constellation organized this spring.

We started out with Kathy Bowrey last month. There's today's event, *Patents as capital in the COVID-19 Pandemic* with Hyo Yoon Kang. And then we end with Fiona MacMillan on May 20th. These events serve a double purpose. They are opportunities to engage with topics that have been, and no doubt will continue to be of interest to wide range of scholars for whom ISHTIP has represented a particularly important and creative meeting place.

But as we all know, during the past year, we've all have to cancel or postpone events that have resulted in putting much of the interdisciplinary dialogue we all value on hold. Last year's annual ISHTIP workshop will take place online this year, in this summer. And it will look quite different from the ordinary format. All information is now online at [ishtip2021.org](http://ishtip2021.org/). In 2022, we hope to meet again in person which will take place in Sweden in Gothenburg. And in PASSIM we had to postpone twice our second workshop, which is entitled Patents as capital, which is now scheduled for May 2022 in real life, as we hope.

So these conversations are important ways to keep the momentum going both for ISHTIP and for the PASSIM project. Today's theme is of course an extremely topical one. And that's the point of departure. We have a text by Hyo Yoon Kang, a Reader of Law at the Kent Law School in the UK. Hyo is also a researcher in the PASSIM project. Following the ISHTIP format, which relies on a commentator to give the paper rather than the author her or himself, today we have two commentators to present the text or to introduce it. And then Hyo will respond after that. First there's Javier Lezaun, sorry for the pronunciation, Associate Professor in the School of Anthropology and Museum Ethnography and Director of the Institute for Science, Innovation and Society at Oxford University, UK, followed by Mario Biagioli, Distinguished Professor School of Law and Department of Communication at UCLA in the US. So before giving the word first to Javier here, a few practical things. We have an hour for this conversation. We will note that ZOOM events are more tiring, not because of the content, because of the technology. Hyo has told me that there's a sort of 15 minute margin at the end. So we have that too, but I think the one hour format is quite good. It worked very well with Kathy's conversations.

So, after Javier and Mario have done their business, so to speak, I'll open the floor to comments and questions from all the participants. So I think it's generally easier if you use the chat function for that. Or you can raise your hand as well. Whatever I'll try and keep track of you. And I'll also try and keep track of time so that there is a 15-20 minutes at the end for questions in general discussion. So I'll do my best to keep time-wise. Javier please.

**Javier Lezaun:** [00:04:01] Great. Thank you for convening the meeting and thank you Hyo for sharing this wonderful and thought provoking text.

I'm going to assume that people have read the text. I'm not going to summarize it in any way, because I think it will, it will lose quite a bit in the translation. I'm just going to pick up a couple of points from Hyo's argument and try to add even more fodder for the discussion. As Eva said, you know, could it be more topical and more current and things are happening in real time that may be worth responding.

And I want to start with that comment that Hyo makes at the start of the essay. And that is --what is truly novel or exceptional about the COVID-19 crisis? Specifically from the IP perspective it is that it initially affected wealthy rich countries, most severely at least, in the first wave of the pandemic. And I will argue that that has sort of a structure, the sequence of arguments around IP. So now that we are seeing in a sense, the reestablishment of the traditional hierarchies of power and traditional inequalities between countries, then we begin to see the familiar arguments for, and against IP pop up, right?

More directly in relation to the IP waiver or discussion or the WTO. But maybe I missed something during the first wave, but during the first wave, when the pandemic was hitting Western Europe and the US the hardest, I don't remember many government officials or even industry representatives making the standard arguments for extensive IP protections.

I don't remember anybody saying, well, you know, whatever can we do to contain the pandemic, let's make sure that we maintain full protection of IP rights. I think what we saw and I'm thinking, especially in the US, is government stepping in, interfering with the market when they needed to, and, and treating the pandemic as a national security issue, which to some extent, at least for a brief period of time cancelled some of the useful framings, which we discuss in IP.

So the question I have is whether or not we are going to revert back to normal and go back to the standard arguments for and against IP in relation to biomedical products, or we are still within sort of window of opportunity where a different politics of IP is possible. And my reading of Hyo's essay is that, and Hyo correct me if I've got this wrong, but the way I understood the essay is she suggests that the emergence of vaccine nationalism is grounded in, and in a sense aligns with, the previously existing regime global regime of IP protections as perhaps represented most clearly by the TRIPs agreement and that there is a sort of full alignment between the nationalistic policies vis-a-vis vaccines and in the future vis-a-vis treatments and what the global IP regime has been doing up to this point.

And I want to make a sort of push back against that argument and, and tentatively suggest that there are some tensions between the vaccine nationalism trends and the previous regime of IP protection that are worth exploring. And then maybe open up for the time being at least a different sort of possibility for a different politics of IP.

And I want to use an example from last week, and maybe you heard this already this already, but as you know, Joe Biden gave an address to a joint session of Congress last week where he began by presenting the achievements of the vaccine rollout program in the US and then there was a section in the speech where he discusses what might come next. And I thought it was very interesting in a sense it was full of nonsequitors, but it was very interesting how different components merged into a coherent discourse. So he said, "No one nation can deal with all the crisis of our time, from terrorism to nuclear proliferation, mass migration, cybersecurity, climate change, as well as what we are experiencing now with pandemics. There is no wall high enough to keep any virus out." So that was the first piece of the section, you know, sort of generic invocation to the global nature of the challenges. But then he immediately went on to say, "and our own vaccine supply, as it grows to meet our needs, and we are meeting them, will become an arsenal of vaccines for other countries, just as America was the arsenal of democracy for the world and in consequence influence the world." And then he immediately went on to say, "But every American will have access before that occurs. Every American would have access to be fully covered from the vaccines we have." Now, I found that interesting because in a sense, the order of importance is the reverse. What he said is we're going to take care of our own population first. But in a sense, we are going to produce so much vaccine, so many vaccines, that there will be enough for everybody and that the US will play the role of becoming, as he puts it, the arsenal of vaccines for other countries. So it's a sort of maybe a slightly more sophisticated version of an America first argument, which has two prongs. On the one hand America first, because we're going to take care of our people first, but America first also because America will become in a sense the global provider of vaccines to the world. There will be some kind of trickle down effect where the US will produce so much of everything that eventually in due time everybody will have his or her own. Now what I found particularly interesting about that section is that phrase “the arsenal of vaccines” and the explicit, note to the phrase, “the arsenal of democracy”, which is how FDR described the role of the US in World War Two.

And for me, that's an interesting key because it is suggests that this discourse is placed within a very specific understanding of geopolitical competition or geo-biopolitical competition. And that vaccines in this case become an extension of the US position vis-a-vis other actors that might challenge its hegemony. I'm assuming that, you know, the other actor here primarily is China. Now for me, that, that sort of argument doesn't sit completely comfortably with the type of framework that TRIPs exemplifies because in my understanding, and I'm no expert in the history of TRIPs, but for me, TRIPs represents a different kind of geopolitical vision you know. It was drafted in the mid nineties is a moment of unipolar globalism, when the US understands that it can maintain, sustain, extend its hegemony through the actions of multinational corporations, most of which are US-based. And by offering full protection of their intellectual property rights in other jurisdictions, you can not only assist those companies in maximizing profits, but it can also export a particular kind of American capitalism to the world. And specifically to China. And to me, this kind of vaccine nationalism, in terms of providing an arsenal of vaccines for the world, represents different kinds of geopolitical moment. For me that's interesting for how IP politics extend, because it suggests more friction between our preexisting world of IP rules and what might come next. And again, I think the key here is not so much the experience of the pandemic, but the geopolitical context through which that experience is mediated.

And you know, we are seeing some inklings of that sort of the structure between TRIPs or TRIPs like regimes and what might come next. You know, we are seeing a degree of openness, at least in rhetoric, from the US trade representative.

So in the Patent or IP waiver discussion we are seeing a different kind of geopolitical configuration of IP policy from the US. Now this is not to say that the world that is emerging of geopolitical confrontation is in any respect better than what we had before, but I think it suggests that IP is going to play maybe a different role because it doesn't, I think it won't carry the same kind of ideological weight that it did under a unipolar US centric position, or I think IP policy is increasingly going to be subordinated to a national interest that doesn't have the same kind of global ideological aspirations that the US had in the 1990s and early 2000s. Again, this is not to suggest that what's coming is better. But I think it suggests maybe against Hyo's initial formulation, that the, the way in which these issues are going to settled it's not fully predetermined by our preexistent regime of IP protection and protection specifically for corporate intellectual property rights.

So I want to leave it here. I mean, there's so much more to tackle in the essay and I hope that through Mario's comments and, and other participants questions, we can address the richness of the text, but I just wanted to offer, maybe it's a light counterpoint to the general trend of Hyo’s argument most of all, to generate discussion. So thank you very much.

**Eva Hemmungs Wirtén:** [00:14:22] Thank you Javier.

**Mario Biagioli:** [00:14:23] So thank you Hyo and Eva for inviting me. It was a pleasure engaging Hyo's paper and I, probably unsurprising, I am very much in agreement with the general structure of Hyo's argument, specifically about the fact that this is a crisis.

This is in a sense that it is an exception. But we should not lose sight that actually what we are seeing is the normal operation of the international patent system and the interests connected to it. So I accept that the general claim, but I want to talk about also, a few things that do not fit that kind of view that what we're seeing is just the same machinery, the same legal and economic machine.

So I want to start with an article that appeared in the New York Times yesterday that announced that now the experts are saying that, there is not going to be herd immunity in the US and that is because of a combination of the fact that people who need a vaccination, the rate is actually slowing down because there are so many people objected to taking the vaccine. And, the other thing is that also the emergence of these new variants. The New York Times, to the best of my recollection, does not connect the fact that there are all these dangerous variants emerging to the fact that, you know, the vast majority of the world’s population has not been vaccinated. So they don't draw the connection between the new danger of the variants with the failure of vaccinating people, especially in the global south. But what I thought was interesting was the statement that most likely we're not going to have herd immunity, which to me was interesting because in a sense, it shows that of, course vaccines and patents are crucial, but in this case specific you know strange intersection between certain kinds of political views and which includes the liberty to refuse vaccination and go out without a mask and do whatever you want -- that actually seemed to have been a much bigger obstacle than the absence of vaccines. Right? So this is not, at least speaking from the US, this is not just a story of vaccines and patents, but it's a story of people in many ways, refusing vaccinations, and then also not connecting there, the notion of, you know personal freedoms with the dangers that they cause to others.

So the summary there is, it is not just about vaccines. And, in this sense, I find, you know, I'm not an expert in history of epidemics and pandemics, but it is interesting to see such a strong role of political beliefs in the outcome of a pandemic.

Okay. So now to what is, what is the normal, and, and I want to quickly go over Hyo's argument about what is normal behind this pandemic and try to come up with a different conclusion. Okay. So I agree about the normal, the normal being, you know, the legal framework set up by TRIPs. This ongoing, strange symbiosis between philanthropy and business. I think Hyo's argument about the role of Bill Gates is quite interesting in the story that, you know, on one side, the philanthropist who gets all sorts of credit for being basically a medical, public health activist, but at the same time, his role is also behind, you know, establishing very specific alliances between universities and pharmaceutical companies and things like that. That kind of relationship is not something that surprises us. Okay. We and anybody who knows anything about philanthropy can easily imagine that those things would happen.

And then there is the usual tension between universities and, and patents and patenting practices. So here, you know, this brings up the example of Professor Gilbert and Oxford that first wanted to have an open license for the patent, but it's not exactly clear, but she was not opposed to patents. And it's not clear how that would have sat with Oxford 's patent policies. So all that stuff is normal, as well as the waffling of companies that try to look good by issuing very, very generic statements, such as Moderna's statement, that they were not going to enforce their IP. But it wasn't, you know, they never specified what that meant. Right. So that's, that's normal. And also what is actually less normal is the fact that I think the pandemic and the development of the vaccines, perhaps, could provide counter evidence for the standard argument about the exceptional role of patenting in pharmaceutical research.

You know, most studies, both empirical and less empirical are about the fact that the patent system is a model that tries to fit all forms of all industries and forms of innovation and this is no longer sustainable. There are certain industries that are not particularly keen on aggressive IP protection, such as software and others instead like, you know, pharmaceutical companies, they do need patents because they need to invest billions and billions. Otherwise they will never find the magic molecule. Some empirical studies seem to support that point, that is, the pharmaceutical industry seems to be a little bit of an outlier in this in this. But in this case, in the case of COVID and again, you know, some historian or historians of medicine or science, will take care of this you know, in the near future, but what we see is almost like a number of parallel inventions. You know, we have different technologies involved with different types of vaccines and they have popped up reasonably quickly in the US, in Europe in China and Russia. Right. So that would suggest that actually it wasn't that difficult to come up with the vaccine, which could be used as an argument against the need for such a strong patent protection.

Anyway, that's an empirical question, but it would be interesting if somebody did a comparative history of COVID vaccines as processes of innovation. Okay. Now something that supports Hyo's point, but with the twist. A few weeks ago, actually, maybe two months ago, there was an interesting op-ed in the Washington Post by my former colleague Madhavi Sunder. Basically the piece was calling for compulsory licensing of vaccine technology so that various countries from the global south could produce these vaccines for themselves. The next day a certain John Stanford published a rebuttal. So I've tracked down John Stanford, and I've watched a lecture by him. So, anyway, let me read you the passage from the op-ed. The op-ed basically says there are all these people who are putting pressure on President Biden to go along and support compulsory licensing. And he says, but if he follows their advice, meaning the advice of the unwise advisors, according to John Stanford, if he follows their advice, he would cast serious doubt about on the reliability of IP protections, making investors far, far less eager to risk their money, developing new treatments and cures.

Notice that the argument. This is not an argument about the present. He's not trying to say, oh, he cannot do that, otherwise poor Moderna is going to suffer or, you know, Pfizer is going to go under. This is not an argument about the current players. This is an argument about the future. This is an argument of principle. I mean of corporate principle, but a principle namely, we cannot give any compulsory license because who knows then the next day, somebody else will ask for another compulsory license for something else. Right? So giving a compulsory license is not seen as an issue in the current pandemic, but it's seen as a bad example, they would weaken the entire system. So this, I think fits with what Hyo discusses as the normal. But it's interesting to see that there is a strong a priority. I mean, I don't know how relevant Mr. Stanford is. I mean, he looks like is a lobbyist of sorts, but the argument is interesting. It's not about this crisis, it is about the future of capitalism and the patent system.

To conclude, let me switch to something completely different. Eva, how much time do I have?

**Eva Hemmungs Wirtén:** [00:24:53] Sorry. Well, a few minutes more.

**Mario Biagioli:** [00:24:55] Absolutely. Okay. So, one thing that I want to inject, but this is just food for thought-- I don't have really an argument, but I was toying with the idea that in other cases, in history, we have seen the US government being perfectly willing to bend IP laws. And that's the during World War Two concerning nuclear technology-- and just to give a plug to [Alex Wellerstein](http://blog.nuclearsecrecy.com/about-me/), the book just came out a few weeks ago -- so there you have the US government effectively taking patents that are relevant to the nuclear war effort and just taking them. Right. So it's a taking of patents there, which is the opposite of, you know forcing other people to license their partners.

But effectively, one could say that this could be analogous to the government saying you have to give me a compulsory license. So the government has done that in cases where it has seen this problem as national security. But the COVID the crisis has not been, despite in the rhetoric, where it has been presented as a crisis of national security, but it has not been treated as such from the IP point of view because in the past, the government had a completely different approach to IP in that context.

So I don't know. I mean, you know, in the Manhattan project, the government did everything in-house whereas in the COVID case, it seemed to be more than happy to farm out. Everything especially during the Trump administration. If you remember the CDC failed miserably in the very beginning to come up with viable tests, right? So maybe, I don't know if this reflects a different investment of the government in actually dealing with the crisis that is in the case of World War Two, where they did everything in house. They build the bomb and they dropped it. In the case of COVID effectively, they're farmed out the work to the pharmaceutical companies. Right. So I wonder whether the completely different attitude about IP reflects, you know, in one case, the government wanting to handle the crisis by itself. In the second case, is that just farming it out? Okay. Now to finish? I think that, although Hyo is right in her emphasis on the normal that we see here behind the media images that that are thrown at us, she basically argues, look, we need to reinforce the rights of countries to be able to exact, obtain compulsory licenses. Now it seems to me that all the evidence that she shows actually supports the opposite in the sense that it does not look like her wishes are going to materialize precisely for all the reason that she's showing -- that it's business as usual. So how the people who this time prevented India and South Africa from being able to develop their own vaccines, you know, how are they going to turn around tomorrow and say, yes. So I thought that here, the choreographing, I mean, given the fact that the COVID crisis has changed so much, right? I mean, even in the last few weeks now, we're looking at these horrific images of the bodies of the dead being burned on pyres in India or, you know, people lying down without oxygen. So now we're seeing images that I think if say India, and this, of course it's a big hypothetical, if India had actually gone ahead, you know, violated whatever patent they have to violate and invest in a domestic vaccine production who would have criticized them now?. I mean, who would ever have the guts to say, okay you know, a few millions of your people are going to die, but, you know, look, you know, we need to support innovation. You know, we cannot make exceptions. If you know, I'm speaking in terms of media, so suppose, you know, India now had a vaccine program who would criticize India for doing that? So I'm trying to say that the crisis might have been wasted in the sense that this crisis could have been a moment for hacking the patent system that Hyo criticizes. And I think it could have been hacked precisely because things have got so bad. Of course, nobody knew. Nobody knew that you know, nobody would have counted on this horrific developments, but we, in hindsight, I feel like if actually South Africa, India have just said, okay, bye bye. We do what we have to do. Given what has happened. I think it could have been a game changer and I'll leave it there.

**Eva Hemmungs Wirtén:** [00:30:30] Thank you, Mario. So I hand over to Hyo.

**Hyo Yoon Kang:** [00:30:36] If it's okay. I'll just say a few points about the piece and why I was interested in Javier's and Mario's opinions. And then I'll try to address very briefly some of the readings of the critical legal thinking piece. So, first of all, I want to thank Eva, Kathy and Fiona for thinking about this kind of event. And they have actually given me the impetus to organize it. And I want to thank Javier and Mario for agreeing to discuss it with us.

So I think the critical legal thinking piece really came after a year of personal agony of the kind of the changes to life that we've all experienced and also the kind of implication, as an IP scholar in the present situation, in the sense of thinking about this in a more critical and in a more historical way, which actually a lot of people have done, but me personally, I hadn't really kind of focused my research on it. I was busy with other things. So this was one location to kind of rethink the state of our field and try to resituate it in the weird situation that we're in right now.

So what was really striking to me was that with the so-called patent bargain, which might be kind of thought about as an individual thing-- so it's the inventor who applies for a patent, then he discloses and then he gets a limited monopoly right, how that is actually also reflected at a much broader level for overall justification of patent system at large - seemed to me that there's a disconnect between the patent justification, which is still very much rooted in national jurisdictions, and the narratives about why we have patents in the first place.

And the kind of disconnect between that kind of national, or nationalistic framework of justification and the actual reality of how IP comes to affect us globally. You know, with the TRIPs, it's become a transnational system. So to me, there seems to be a disconnect between the overall legitimacy of the patent system at large, but then the, I guess the reality of how it actually plays out right now. When we think about that kind of justification or public good or benefit or progress of arts and science of the US language, I really wanted to query the notion of who that public is. And I think it's nothing new. We know that there are different publics, different people profit from it, but I think the notion of a global public is really missing from the IP law discourse.

So, there is some kind of, I think, a blind spot there within the scholarship itself. The idea is that IP or patent benefit somehow, in a trickle down or a trickle across way. Mario's article in [*History of Science, Special issue: Technologies of Law*](https://journals.sagepub.com/toc/hosa/57/1), really queries this kind of trickle across or the trickle down and how it actually cannot be measured as a balance or as a patent bargain very well. And I think right now, what we're seeing is that the kind of trickle down/across is only happening within certain national jurisdictions, but it's not happening at the global scale. So there, again, we have a disconnect between the national and global levels of transnational levels. And I think this is because IP has, or patents for pharmaceuticals, specifically have become a root problem.

Patents today are arguably no longer property rights, balancing public and private interests, but they're unregulated monopolies that have a force on a global scale. A block of countries put their opinion forward in the last TRIPs meeting on the discussing the patent waiver proposal by South Africa and India and wrote, and I quote, "COVID 19 reveals the deep structural inequality in access to medicines globally and the root cause is IP that sustains and dominates industry's interests at the cost of lives." This to me really underlines the need to think about the patent system, not just as a transnational and national system, but really embedded within the global history of trade.

And I think it goes back to 19th century, and historians of science and economic history have already worked on it. But I think what what's really clear now is that for whatever different domestic political reasons and constellations, and I think the US was going through the election, I think we kind of all forgot about Trump now - but you know, the election was pretty recent, it was only a hundred days ago. We need to think back about it. I think this goes back to what Javier was saying about the role of the US within the global trading framework of which TRIPs has also become part. And it's also a history of 19th century expansion of global trade and the rise of the patent system, and the Paris Convention as a result of that.

And what is really missing from that history at the moment is the history of colonization, not just a physical goods, but also of knowledge. So, you know, when we think about the patent system of the Paris Convention, it's really about how different goods can be protected in different jurisdictions. And that's exactly what's happening now. So in a way, I mean, I think this is really the kind of, I guess, a broader arch of historical research that still needs to be brought together from different angles. I wanted to ask Mario about two different points, which well, actually, when I was thinking about the talk, I really had two different articles in mind I wanted to put into conversation with my little text. One is the piece that's already mentioned by Mario about [Weighing intellectual property](https://journals.sagepub.com/doi/full/10.1177/0073275318797787). And then the other piece is by Javier Lezaun and Catherine Montgomery about [The Pharmaceutical Commons](https://journals.sagepub.com/doi/full/10.1177/0162243914542349). So I'll start with Mario's piece.

Mario's piece, I think it's, it's very interesting in the way that the so-called patent bargain is not really measurable. What ‘law’ is trying to measure different things and for arguments, both pro and Contra IP, and it turns out that there is not that much to measure. And in the end, we were actually end up with different scales. The balance is not something which can be really measured, but intriguingly Mario, you end with or you write the sentence towards the conclusion for better or worse. And I quote "For better or worse, the patent system falls in the too big to fail category. So for better or worse, the patent system falls into the too big to fail category."

And that really reminded me straight away of the last financial crisis where we said the banks are too big to fail. We have to rescue them. So just kind of putting this into the context of what is happening right now. I mean, as you know, much of the COVID, the vaccines that we see on the market today have been financed for years with a lot of public money.

Moderna has been more or less like hemorrhaging money. They got a lot of NIH funding. The vaccine is based on patents that they're actually not really licensing from the NIH or the NIH is not enforcing any licensing. So. In a way, when you think about the public subsidy that has gone into the COVID 19 vaccine, I don't really see that kind of rewarding the risk taken with a monopoly argument here, at all, and I wonder: why should the patent system not be failed? In the present circumstances, because it's not something that, you know, that is purely private just in pure financial terms. There has been a lot of public money going into it. So if the ‘patent system’ fails, then in a way, the public benefits from the failure of the patent system for this particular group of inventions.

So, this is quite interesting because what is too big to fail and, or put it the other way around: isn't the patent system failing us right now? And it kind of goes back to what I found really fascinating and important in Javier's and Catherine's article, which describes the philanthropy capitalistic drive behind the so-called private public partnership driving the research in neglected tropical diseases-- and the article came out, I think in 2014 in [Science, Technology and Human Values](https://journals.sagepub.com/doi/full/10.1177/0162243914542349), but the research has been going on for much longer before that. So we're talking about 10 years before today and they foretold that these so-called new pharmaceutical commons might result in new enclosures. And what's really interesting there is that the so called the hybrid private public property model -- it's not exactly, you know, a commons. The commons are in a way, also excluding certain actors particularly, because of that promise of future outcome, be it invention, patent, IP, and so on.

I wondered, what happens if this private-public partnership is in fact by now no longer private-public, but it's private-private. So when we think about the role of universities and whether we can still call them to a certain degree, public institutions - what if they're already more private than public, then we actually ended up with a private-private partnership. Which then leads to the question:sSo what if this kind of new pharmaceutical commons is in fact a cartel? We have a group of private actors or quasi private actors forming together and having IP rights. In that sense, this whole idea of public or the rhetoric of ‘public’ in IP law discourse doesn't really hold anymore. I mean, it seems to me in many respects, and I think we have to be quite specific about this particular COVID vaccine or medicine scenario, the ‘public’ seems to be a kind of a narrative smokescreen, which kind of blanches out the fact that a lot of the public, what would be thought is public, is in fact private.

I think this is really where I just want to say a few words about what is normal. And I think I don't disagree with Javier's and Mario's assessment of that. There is a broader bio-geopolitical context in which all of this needs to be situated. But at the same time, the history of TRIPs was, or the way in which the TRIPs was negotiated, it was the geo political context already. I guess with the kind of shift in the broader geopolitical powers and trading powers there might be shifts again, but then it might not necessarily be the same thing.

I mean, it won't be unipolar, and I think it's interesting how China has positioned itself within the overall TRIPs waiver discussion because they haven't really actively supported it, but also they haven't actively opposed. Because when you look at the last PCT application filings like the biggest filers are coming from China. So I think in a way we'll see that the same system might be used for other players as well.

But what does it mean? I mean, it just means that the kind of leading democracy or the arsenal of democracy that the US sees itself is already based on a vision of exclusionary and geopolitical competition: I see a huge contradiction there being an arsenal for the ‘access’ and being an arsenal of democracy, but at the same time the ones who benefit from the current IP and vaccines are mainly American companies. I think I’ll there.

**Eva Hemmungs Wirtén:** [00:43:17] So Javier, Mario? Mario, do you want to respond first, perhaps?

**Mario Biagioli:** [00:43:23] Just very quickly -- Hyo is right. That's what I say in that article. I was channeling [Fritz Machlup](https://cdn.mises.org/An%20Economic%20Review%20of%20the%20Patent%20System_Vol_3_3.pdf), the economist who I think in the fifties wrote that, you know if we did not have a patent system in place, I would not have any good argument to say that we should introduce one. But now that we do, I don't. I don't have a very good argument to say that we should get rid of it. Right.

So I, what I like about Machlup line is that, you know, basically it's an evolutionary statement. You know, this thing is just, it has grown. It is here. It is big. So that's what I'm meant by too big to fail. I was trying to point to the fact that, you know, it's a very, very, very large artefact supported by many people, but not by many reasons. So I, I would not object if somebody did something to it. I was being descriptive, not normative as they are saying law schools.

**Javier Lezaun:** [00:44:37] Yes. Very quickly. I mean, thank you Hyo. There's a lot of stuff to unpack there. I think what will it be? It's very important to determine what stories of invention or innovation are going to be told about the COVID-19 pandemic. What has been discovered since January, 2020, because in the sort of ideal, typical version of IP and justification for IP protection, especially in relation to pharmaceutical companies or vaccine companies, they seem to be premised on the idea of, you know, inventing a new molecular entity or radically new vaccine platform.

And my sense is that that hasn't really happened since January of 2020. I mean, there was some vaccine platforms ready to be experimented upon, but they have been already discovered and patented. Much of the innovation since January has to do with enhancing production capacity, facilitating transfers of materials and equipment is scaling up manufacturing and so on. And those kinds of improvements are less easily folded under the standard ideal, typical IP success story, because a lot of that expertise and know-how is probably not protected by specific patents, but it's a matter of industrial capabilities with very heterogeneous components. So, and the paper you refer to, there's a paper about a situation where pharmaceutical companies are willing to share IP In the area of neglected tropical diseases, at least some companies are, because you know, they sit on a lot of useless IP that has no value to them and putting some of that IP in circulation allows them to create to establish new collaborations, to trigger new networks, to be partners in new partnerships. And the rationale is that they have other capabilities that are not formally protected by intellectual property rights. That gives them a position of strength when, and if it comes to actually developing a new product and that position of the strength is not so clearly determined by IP rights. It is determined by a series of again, industrial capabilities, know how, trade secrets and embodied expertise. That's where their position of strength comes. So you can translate some of that argument here, right? I mean, some people like Bill Gates, argued that there is no point in waiving IP rights because the real story is about production capabilities and more informally embodied expertise. And they're using their argument in an interesting way to argue against transferring IP, right? So IP is not important. It's not the story here, but let's not share it. And I think the point is it really goes back to an argument that Mario made, which is, you know, this is about now. It has become an argument about setting precedents. And I think that's at the heart of the discussion about the waiver at the WTO. It is a politics of precedent setting more even than, than a politics of transferring IP. And it's an argument about not shifting too much or too radically the set of ideological assumptions that underpin the IP system. And I think that's, I, that's where I still think there is an opening there initially around the waiver discussions and possibly all the discussions that we'll have in when relatively new treatments come along.

I think there is still a potential for, for setting that precedent, even if most of the crisis, as Mario said, has in a sense being wasted already.

**Eva Hemmungs Wirtén:** [00:48:32] Okay. Thank you. So yes, we have about 10 minutes. If there are any other comments or questions, please type in the chat or raise your hand and you have a few minutes left.

**Henrique Carvalho :** [00:48:53] Hi everyone. And thanks for this discussion here. I really enjoyed the piece when it came out and this was a very, very interesting discussion. My question, I think, ties in with what we're saying now and it is a question essentially about the tangible intangible divide in IP or what is it that we're really talking about? And I was thinking about this essentially. On the basis of that argument, that what is valuable might not be the patent or only the patent, but also the know-how, embodied knowledge, the very materials and all of those things they need to do the vaccine. And was this kind of the basis for a reflection on -- I'm not really sure how we should use this because as Javier was saying, there is something completely contradictory in saying that, well, that's not the big question but we won't share it anyway. So it is something like a kind of an ambivalence that we can see also in other two ways that I can think of.

So the first one was when many months back or so, Ursula von der Leyen was saying, well, we spent so much time focusing on developing the invention that we didn't really think about manufacturing it. And you know, how serious can we take this kind of statement from the person in that position [President of the European Commission]? And what does that reflect on the meaning of, of patents and IP? Right? So is it really that we're fooled into thinking that these are kind of pure intangibles or is it a more tactical use of things?

And the second example is the very call for compulsory licenses. Would they be enough and are the people who are seriously putting that idea forward using it as a way to resolve this problem, or again, as an issue of precedent setting, which is a very important one, but if you break the patent and still you can't produce a vaccine. Well, then you open a new battle, which is, you know, free up the trade secrets and so on and so forth. So I would really, if you have time, we're interested to hear your thoughts about that. Thank you.

**Eva Hemmungs Wirtén:** [00:50:57] So your, before you answer, I also have Kathy that have signaled that she has a question or a comment. Do you want to do that at the same time? And then we'll wrap up after that. Is that okay? Or do you want to take Henriquez first? And then I think there was also Joshua and Kathy. So Kathy? ,

**Kathy Bowrey:** [00:51:18] So I think there is a mistake in a way that we're talking about TRIPs. For me TRIPS through the WTO was about resetting the historical connection between IP and manufacturing. It's never been about IP or manufacturing, but it was about designing or redesigning how that was. And I think that we've done a lot of disservice to ourselves as IP academics by falling into the trap, just considering what goes on in the IP space. And I was just wondering what Hyo thought about that. ie. TRIPs isn't about IP. TRIPS is about IP and it's how it connects with manufacturing.

**Eva Hemmungs Wirtén:** [00:51:55] Josh, are you there somewhere?

**Joshua Sarnoff:** [00:51:59] Yeah. So just three very quick thoughts. The first is that as demonstrated by Pfizer, we don't know the extent to which pharma has already been breaking IP to make the vaccine. They were sued. The Bolar exception is probably the reason that they were able to develop the vaccines as fast, but we have both research tools and manufacturing inputs that are a question.

The second is that it calls into question the basic patent bargain, which is that you can make and use the disclosed invention. And we know that's not the case for these vaccines. So you have to ask. You know, doctrinally it's time to reconsider what the patent bargain is all about because compulsory licensing and working requirements don't work in this context.

And, and that just leads back to the real issue, which Javier, I think alluded to, which is to what extent is the government's role here in compelling a commons, really the critical question. And I think that's the area, particularly in terms of compelling trade, secret sharing and the World War Two examples that we need to be thinking about.

**Eva Hemmungs Wirtén:** [00:53:21] okay. Thank you. So, Hyo?

**Hyo Yoon Kang:** [00:53:24] In terms of the TRIPs waiver, the patent is not just about the intangible knowledge, but it's about the use and manufacture of inventions based on the intangible knowledge, which are then ideally disclosed in the patent documents. So I think for me that, that the binary between tangible/intangible is actually not that clear in the TRIPs at all. I think, I the TRIPs is actually a trading instrument, which for me is a clear sign that we're not just talking about knowledge sharing or not knowledge sharing. It's about the power to manufacture something or not for selling it on the marketplace. I think hopefully that that addressed also Kathy's comment to a certain degree.

The question of patent system legitimacy at large is, for me, the key one right now, you know, to what degree is the myth of the patent bargain is really, really destabilized at its fundamental core. And what I'm hoping is that, to a certain degree that I see it as a precedent for, you know, the pharma don't move an inch. They don't want to set any precedents. But we already had precedent in this regard. So we had the anthrax compulsory license within the in the U S after the 9/ 11 attacks. And we also had precedent with regards to the AIDS pandemic. We had the government action in the Second World War .... So there are all these precedents. It just seems to be that these precedents are not really forming an overall jurisdictional narrative, a jurisprudential narrative. So I don't know. To me, this seems like a rerun of a lot of the debates from back and forth the during the AIDS patent battle in the early 2000s.

**Eva Hemmungs Wirtén:** [00:55:10] Okay. Is there anything else you want to add to what's popped up in the chat?

**Hyo Yoon Kang:** [00:55:21] Or maybe Mario will have you one too?

**Mario Biagioli:** [00:55:23] Just one thing. You're right by mentioning the, the C pro license during the anthrax scare. So, you know, it's, it's a pattern of two. So probably from the evidentiary point of view is not worth much. But in both cases you have what the government saw as an attack by people, right? The terrorists, who are using anthrax and allegedly the Germans who might have a nuclear weapon in World War Two. So in those cases, the US government has been totally happy manipulating the IP system. With COVID, it was not represented this way. So yes, there is the rhetoric of the war, you know, this and that, but it has not been presented or perceived as a war and, you know, they have not touched the IP. So it looks like the connection between war of sorts and the government's flexibility vis-a-vis the patent system seems, seems to be a little bit of a pattern, but I'll leave it there.

**Javier Lezaun:** [00:56:38] And maybe I will add more points in relation to I think it was Henrique's discussion of the sort of balance between tangible and intangible IP protected, non IP protected components in vaccine production capacity, because that's one of the arguments I see said that it's being used against the waiver. That, you know, it's not enough to simply transfer IP because there's a lot of informal and tangible, embodied components that need to be in place. And I think that argument conflates two different arguments, right?

One is to say you know, producing vaccines at the scale requires a variety of IP protected and non IP protected components. And that's obviously true, but I think there's a second argument in that claim or a second assumption, which is that other countries that are not going to be able to put together these assemblage of components very quickly. And that's the part of the argument with which I disagree. And I'm obviously no expert in the vaccine production process for mRNA vaccines, but I think historical precedent suggests that other countries are capable of producing fairly advanced production systems for biomedical products and relatively quickly. And the production capacity can be decentralized much more than key actors in the global north tend to assume. So I think we need to disentangle those two arguments when it's a general argument about how vaccine production works and the role of IP there. But there's a second argument that I think we need to contest about how difficult, if not impossible, it will be to allow all the actors or to help all actors build their own production capacities.

**Eva Hemmungs Wirtén:** [00:58:22] Okay, so thank you all. I'm going to stop this. It's been a wonderful, really interesting conversation. Thank you Hyo, Javier, thank you, Mario. I guess, for even staying awake was, was, is it was a great achievement. Yeah. And thank you Hyo for your super-interesting piece. I just, I posted information on the next conversation, which is on May 20th with Fiona with Jose and Kathy commenting.

And I'll be chairing that too. Don't forget. We'll also be using Twitter to spread the information. So thank you all so much. Thank you. Wow. Thank you. Thank you.