Emily C. & John E. Hansen Intellectual Property Institute

TWENTY-SEVENTH ANNUAL CONFERENCE INTERNATIONAL INTELLECTUAL PROPERTY LAW & POLICY

Fordham University School of Law Skadden Conference Center, Costantino A/B 150 West 62nd Street New York, New York Thursday, April 25, 2019 – 8:15 a.m.

SESSION 1: PLENARY SESSIONS 1A. Key Current IP Issues: Reflections & Analysis

Moderator:

Hugh C. Hansen

Fordham University School of Law, New York

Speakers:

Erich Andersen

Microsoft Corporation, Redmond

The Intersection of Intellectual Property Rights and Open Source —

Changing Norms and Practices

Richard Arnold

Chancery Division, High Court of Justice, London Website-blocking Injunctions and Streaming Server-blocking Injunctions

David Carson

U.S. Patent and Trademark Office, Alexandria Copyright in the Supreme Court: Fourth Estate, Rimini Street, and Candidates for Certiorari

Robin Jacob

Faculty of Laws, University College London, London
IP Exhaustion of Rights —
Should Different Kinds of Rights Have Different Rules?

David J. Kappos

Cravath, Swaine & Moore LLP, New York

Availability of Injunctions Against Infringement of U.S. Patents:

Going, Going, Gone

Bryan C. Zielinski Pfizer Inc., New York

The Value of IP—Where Are We Headed?

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PROF. HANSEN: Welcome to the Twenty-seventh Annual IP Conference. As I've said many times, I don't remember the first one that well because I was only twelve. Thank you all for coming.

First, I'd like to thank our sponsors without whom we could not have this conference. It's fantastic that year after year they have come and supported us. From the beginning we had Clifford Chance, Ladas & Parry, Time Warner (now WarnerMedia), and Linklaters. But there are a tremendous number of others. I want to specifically thank Microsoft.

Actually, I don't think the Conference would exist at all without John Feerick, who was the Dean of Fordham Law School at the time. Keep in mind I first spoke to him in 1992 about a conference on international IP. At that time nobody cared about IP outside of their own country; that's a fairly recent development flowing from globalization. He took the risk of inviting a whole bunch of people, having to pay expenses and everything else. I can tell you there wouldn't have been one other dean then or now who would have done it. I'll be forever grateful for John Feerick's support.

And also, Brad Smith of Microsoft from the beginning has been tremendously supportive. I just can't say how much, and I'm very, very thankful for that.

Of course, we have a great faculty, as always. We often say that the audience, the registrants, could just switch places with the faculty and there wouldn't be any difference. So if someone taps you on the shoulder, don't be surprised that they might be speaking in one of our sessions.

We have a tremendous IP Institute team without whom we wouldn't be able to put on this Conference: Yuan Yuan Wang, Rilana Wenske, Soban Ahmed, and Courtney Soliday, our Graduate Law Fellows; and we have a number of research assistants who are here and are tremendously helpful. Especially, this is the week before exams, so it's wonderful that they've actually taken this time.

We always like to thank Verbatim. If you ever need good recording and transcription of remarks into text, they're fantastic. Sharon Hammer has been here from the beginning. She's not here this week, but we have Noreen O'Connor, Dudley Stone, and Jessica Smith. What I appreciate is usually in cold print I look even worse than I sound, and they are able to put it together so it looks like I actually know what I am talking about.

Larry and Brinson from Bridget Media will be video recording this and we will be putting some of this online.

Kevin Kane, our photographer. Thank you, Kevin. I'm not going to stay like this all day, Kevin. Thank you.

Blue Line Productions, which is doing all the technical work. Allan Gingold, thank you so much.

Platinum Group, who are working in the registration area, have been helping us for years.

It's a large undertaking. We have thirty-one sessions, 177 conference faculty, 515 attendees. It's really a massive operation. Every year I'm very thankful that it seems to run very smoothly. I certainly appreciate it, as does the Law School.

Dean Matthew Diller was supposed to be here, but something came up and he is unable to attend. I saw in his notes a brief comment about Hugh Hansen and brilliance and wonderful. I just want to pass on that little nugget of probably what he would have said.

What is our format? As you know, it's a very egalitarian process. We've had associates from law firms on panels with important judges from around the world and IP

government leaders. Everyone is equal. Keep in mind all these famous people were once young and not famous, but that didn't mean they were dumb or couldn't do it or anything else. They could always do it, and their talent is still there. We like to have a broad range of people who are speaking, and that has always served us well.

You'll notice when you look at the list of faculty all their exalted titles, but otherwise we just use their name and affiliation. The idea is everyone who speaks receives equal attention from the audience, has equal value in what they're saying. All their bios are in the materials we handed out and they are available on the IP Institute website.

I'd like to start by asking the panelists to briefly introduce themselves by name and affiliation and just say a few words about how thrilled you are to be here at Fordham.

MR. ZIELINSKI: Bryan Zielinski, Pfizer. I am completely thrilled to be here.

MR. JUSTICE ARNOLD: Richard Arnold from the High Court of England and Wales. Glad to be here again. Thanks for the invitation.

MR. KAPPOS: Dave Kappos, Cravath, and I'm super-pleased, Hugh, to be here for probably the twenty-fifth time.

PROF. JACOB: Robin Jacob, University College London. I'm here because Hugh bullies me to come.

MR. ANDERSEN: Erich Andersen from Microsoft. I'm very excited to be here.

MR. CARSON: David Carson, U.S. Patent and Trademark Office. I've come to just about every one of these, and one of these days I'm going to enjoy it. [Laughter]

PROF. HANSEN: By the way, you're going to see me on billboards and everything else with 5-Hour Energy. I'm just getting a little picture now of how it's going to look. It's something that I need.

As you notice, the talks are short, only seven minutes. What's the reason for that? If you only have seven minutes, you have to think very hard about what are the most important things you want to talk about. Of course, what we want is the really good stuff, but we also want to have time for discussion. We've found over the years that the best stuff comes from the interaction among the panelists, so we want to emphasize the discussion.

Bryan, you are the first speaker: "The Value of IP — Where Are We Headed?" MR. ZIELINSKI: I'll jump right into it.

I'm Bryan Zielinski, Chief Patent Counsel at Pfizer. I am going to provide a brief overview regarding some bills and some discussions that are happening in Congress regarding our industry. It will be very much only an overview in seven minutes.

Where are we? We have a new Congress, the 116th Congress. It's split in terms of party affiliation; we have a Democratic House and a Republican Senate. Both have been active in terms of turning their attention to the biopharma industry. The pharmaceutical industry I define as including both biotech and traditional pharma. There have already been hearings, several hearings as a matter of fact, in both the House and the Senate.

Notably, in February there was a hearing at the Senate Committee on Finance that included CEOs from all of the large pharma companies in the United States, including Pfizer's CEO Albert Bourla. The focus of the hearing was prices of medicines, and that's going to be a key focus in different ways in all the bills that I'm going to discuss.

Just as a bit of background, in our industry therapeutics are divided into small-molecule and large-molecule therapeutics. Typically, the small-molecule therapeutics are the ones that you are familiar with that you take as a pill. The large-molecule therapeutics are typically large proteins, monoclonal antibodies; they are very, very complex; and they are typically administered intravenously.

The way we approach them in our industry from a patenting perspective is we patent all the innovation associated with these molecules. As they're developed, a lot of technical issues are overcome and we often file patents on those.

What you typically see on the small-molecule side is somewhat fewer patents than on the large-molecule side. That reflects the complexity of the large molecules.

With the small-molecule therapeutics, there's a particular patent resolution process that's well-known as the Hatch-Waxman process. This process includes the Food and Drug Administration (FDA) Orange Book. Large-molecule therapeutics have a similar FDA allocation known as the Purple Book. Both the Orange Book and the Purple Book lay out all the approved small- and large-molecule therapeutics. The difference is that in the Orange Book, which relates to small-molecule therapeutics, they list all the key patents that relate to the approved small-molecule therapeutics. If you are a generic competitor and you seek to identify those patents that pertain to the molecule for which you want to develop a generic alternative, you can identify the patents that you need to get around or invalidate.

For large-molecule therapeutics it's a little harder. You have to go through what's called the Biologics Price Competition and Innovation Act (BPCIA)¹ process. That Act, which was enacted several years ago, codifies what we call the "patent dance." The patent dance for large-molecule therapeutics involves an exchange of patent information — we call it a 3A List — that comes from the innovator, and it's a comprehensive list of patents that pertain to the innovative product. As I mentioned, that only comes about when you're in actual litigation related to a biosimilar of a large-molecule therapeutic. You can't see it in advance in any publication. The only way to identify the patents would be through doing your own searching.

Another difference, in addition to the listing of patents, is that small-molecule therapeutics have a thirty-month stay of approval once an IP suit is filed under the Hatch-Waxman Act. There is no corresponding stay of approval for a biosimilar.

Finally, there is a difference in terms of what the generic receives as a benefit. A first-filer generic on the Hatch-Waxman side gets 180 days of exclusivity relative to other generic competitors. There is no similar benefit for a generic in the biologic space.

Those are the key differences.

I'm very quickly going to mention that there are just a few things out there that actually will affect the resolution process for our large-molecule therapeutics.

One is the pending Biologic Patent Transparency Act² in the Senate. This Act effectively would seek to replicate the Orange Book in terms of listing all the relevant patents that pertain to large-molecule therapeutics. Pfizer is supportive of patent transparency. As a matter of fact, Pfizer is the leading company supporting the Patent Information Initiative for Medicines, which is a global database that provides information on key patents pertaining to certain small-molecule therapeutics in certain disease areas.

Another pending bill in the Senate is called the Preserving Access to Affordable Generics & Biosimilars Act.³ This is aimed at certain settlements that have been seen in the innovative and generics space. The focus of this is to prohibit anticompetitive "pay-fordelay" agreements. There are very few of these agreements currently, following the

¹ 42 U.S.C. § 262.

² Biologic Patent Transparency Act, S. 658, 116th Cong. (2019).

³ Preserving Access to Affordable Generics and Biosimilars Act, S. 64, 116th Cong. (2019).

Supreme Court decision in *Federal Trade Commission v. Actavis Inc. et al*⁴ in 2013, but still this is aimed at solving that problem to the extent that it still exists.

There are several bills pending that relate to compulsory licensing as a penalty. The point of these Acts is basically to put the government in the position of negotiating prices or of setting prices; and if there is a failure on the part of the innovator to comply, there is a threat of a compulsory license that the government can grant to a generic competitor that would allow a generic competitor to come in.

We are obviously not in favor of this type of thing. We think compulsory licensing should only be done in rare circumstances, and this isn't one of them.

That's mine in a nutshell.

PROF. HANSEN: Okay. So what is the value of IP in your sector?

MR. ZIELINSKI: We view it as an incentive to do research. The benefit of IP is it provides us a period of exclusivity in which we can exploit the inventions that come about in our research. Much of that is what we think of as breakthrough therapeutics, and you have seen a lot of that — a cure for hepatitis C, breakthroughs in oncology. It has served as our incentive mechanism. IP is not the only incentive — there's also regulatory exclusivity — but it is the key one.

PROF. HANSEN: What are the chances of any of these bills passing?

MR. ZIELINSKI: I think some have a chance. Probably the more radical measures are unlikely; I think it is more political posturing. But I think patent transparency has a very real chance of passing. Maybe patent settlements as well.

PROF. HANSEN: Are these something you can live with or you actually like?

MR. ZIELINSKI: I think in general we can live with some of them in amended form. The more radical measures would be difficult, but then again, I don't think that those are likely to pass.

PROF. HANSEN: Do you do work on the Hill? Do you go up there and talk to these people?

MR. ZIELINSKI: Yes.

PROF. HANSEN: Is the Senate or the House more active in this?

MR. ZIELINSKI: Right now it's probably the House.

PROF. HANSEN: What committee is that?

MR. ZIELINSKI: The House Judiciary Committee is often very active.

PROF. HANSEN: Do the people know what you're talking about when you go up there or do you have to really spend a lot of time explaining the infrastructure of the whole industry and everything?

MR. ZIELINSKI: When I go to the Hill and I speak at the different offices, I tend to be speaking with staffers. Some of them are incredibly knowledgeable. Some of them are senior attorneys who have dealt with these issues over the years. Sometimes you have to bring them up to speed, but often, as I said, they are very knowledgeable, and they have been there for a while and have seen these issues before.

PROF. HANSEN: Any questions or comments from the audience or the panel on this?

PROF. JACOB: Yes, I've got one. You said the benefit of the patent system is to encourage research. One of the myths, I think, is that it's just these kinds of inventive "Eureka!" moments. In the real world, one of the benefits of the patent system is to encourage the development of an idea as well as to have the idea. You don't spend your millions finding out whether this really works in patients years after you've taken out the patent without having the patent. I think one of the biggest misconceptions amongst the

⁴ Federal Trade Commission v. Actavis, Inc., 133 U.S. 2223 (2013).

populist-minded politicians and whatnot is that they think "Oh well, you've made the invention, it starts now." It hasn't.

MR. ZIELINSKI: That's very true. Actually, typically for us it's ten years of development. We file the patent very early on. We patent our molecules when we first see compelling activity in what we call *in vitro* models that correlate with human efficacy. That's well before we go to the clinic. Once we go into the clinic, there are years of clinical trials where you have to do safety and efficacy trials that meet the requirements of FDA and foreign equivalents of FDA. That takes years and the failure rate is very high. By the time we get approved, we typically have a period of exclusivity on the order of around twelve years.

PROF. HANSEN: Another question?

MR. KAPPOS: I want to come back to the exclusivity component of patents in the biopharma industry and the role of Congress now. I want to see if you can put a little finer point on this.

My understanding is we are facing a serious threat in the United States on the back of legitimate concerns about drug pricing. We are all concerned about that. But, as a result, we've got multiple members of Congress talking about essentially a compulsory licensing regime for the research biopharma industry. That seems like a major problem to me. Can you put a finer point on that?

MR. ZIELINSKI: I can't emphasize how much that would actually chill the incentive to do research if your economic return on the investment becomes less. It is highly uncertain in the first place because you are actually not sure that it is going to work. The failure rate is well over 90 percent because, as good as our tests are, they don't correlate ultimately with how the drug is going to act in a human. That very high failure rate in combination with uncertainty around economic return would significantly undermine the incentive to do research in this space very, very significantly.

PROF. HANSEN: Bryan, to what extent do you use social media to make your point about the need for these periods of exclusivity?

MR. ZIELINSKI: I personally stay away from it. [Laughter] I actually think that's a really good way to spread the message as a corporation. I don't use it individually, but as a corporation I think it's a fantastic way to reach people. That's where people are, so that's where you have to provide the message. If people are there, that's where you have to go.

PROF. HANSEN: We have another question.

QUESTION [Jürgen Dressel, formerly with Novartis, Basel]: Bryan, you mentioned that you file your patents very early. I think there is increasing pressure to do that even earlier when you look at all the clinical transparency initiatives that you told us about.

Do you think there is space for other types of exclusivity instead of patents, like regulatory data protection, that should play a larger role in encouraging innovation?

MR. ZIELINSKI: Yes, and on that note I think Europe actually has a fairly decent model with ten years of regulatory exclusivity.

One problem with having low regulatory exclusivity in the United States for small molecules — we have twelve years for biologics but only five years for small molecules — is that you end up for small molecules in the United States developing the compound that has adequate patent protection and meets your therapeutic goals. But you need to hit that first element first, have the patent protection. Sometimes you don't have that. Sometimes your composition's key patent has already expired, and then years later you uncover a new use for your molecule, that it could be used to treat something that's

important that you didn't know of initially, and you don't have any more basic patent coverage for it; you have much thinner secondary patents.

By having regulatory data protection, you end up with an incentive to develop the compounds that are the best therapeutics and have the best patent protection. It would be better if it were just the best therapeutics. And regulatory data protection would help overcome those situations where patents don't give you enough of an incentive because you don't have the basic patent anymore.

PROF. HANSEN: Thank you very much.

The next speaker is Richard Arnold, who is an expert in many areas, one of the most articulate people I've ever met, who will speak about website-blocking injunctions.

MR. JUSTICE ARNOLD: Thank you.

A quick reminder of the legislative basis for intermediary liability in the European Union and the United Kingdom.

- Article 8(3) of the InfoSoc Directive⁵ was legislatively implemented in the United Kingdom by an amendment to the Copyright, Designs and Patents Act of 1988 to insert Section 97A.
- We have Article 11 third sentence of the Enforcement Directive,⁶ which generalized intermediary liability to all intellectual property rights. Rather bizarrely, the United Kingdom did not legislatively implement that.

A quick recap on where we stand with regard to website-blocking injunctions in the United Kingdom.

The first injunction was granted eight years ago, in 2011, in *Newzbin 2*. There was no appeal in that case by either side. Subsequently, injunctions were granted in another fifteen copyright cases against over 250 websites on unopposed applications.

Then, along came the *Cartier International v. British Sky Broadcasting Ltd.*⁷ case, which was the first case where the right relied on was trademark. In this case there were appeals by the ISPs against the injunction on all grounds at the Court of Appeal and then on cost orders only at the Supreme Court.

The effect of the decisions of the Court of Appeal and Supreme Court is to confirm the jurisprudence built up at first instance in the copyright cases since 2011, save with respect to costs of implementation. I'll come to that.

We now know that the courts have jurisdiction to grant website-blocking injunctions in trademark infringement cases and, by implication, any other IP right, despite the absence of legislative implementation.

The Supreme Court held very clearly that the courts had this power applying "ordinary principles of equity," as it was put, regardless of EU law. That is a decision of considerable import more widely, and I think that is going to be a pointer toward things going forward in the future.

Despite the absence of legislation, the jurisdiction is adequately prescribed by law. The threshold conditions for the grant of an injunction are:

- (1) the defendants are intermediaries;
- (2) the users and/or operators of the website are infringing the claimant's IP rights;
- (3) those users and/or operators are using the defendants' services to infringe; and

⁵ Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society.

⁶ Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights.

⁷ Cartier Int'l v. British Sky Broadcasting Ltd. [2016] EWCA Civ 658.

(4) the defendants have actual knowledge of that, but that may be as a result of being notified by the rightsholder.

In order for an injunction to be granted eight criteria need to be taken into account: it must be:

- (1) necessary;
- (2) effective;
- (3) dissuasive;
- (4) not unnecessarily complicated or costly;
- (5) avoid barriers to legitimate trade;
- (6) fair and equitable and strike a "fair balance" between the applicable fundamental rights engaged;
 - (7) proportionate; and
 - (8) safeguarded against abuse.

Of those factors the key one is proportionality because consideration of the other factors feeds into the proportionality analysis. When considering proportionality, a key consideration is the nature of the technical measures which the ISPs are required to adopt and hence their efficacy, costs, and impact on lawful users. These technical measures are set out in the orders that the courts grant.

Although it is a commonplace that these injunctions are quite easily circumvented, it's quite true, it does not follow that they are ineffective. On the contrary, the evidence shows that they are effective in reducing traffic to targeted websites. Whether the extent of the reduction warrants the costs of the injunction (if and to the extent borne by the ISPs) and any impact on lawful users is a question of proportionality.

The High Court and the Court of Appeal considered a series of alternative measures proposed by the ISPs but were not persuaded they would be as effective.

- There is no requirement for the right owner to sue or attempt to sue the website operators first or to prove that it would be pointless to try.
- An important practical point is that the orders enable the right owners subsequently to notify to the ISPs any other IP address or URL whose sole or predominant purpose is to provide or facilitate access to the targeted website, which must then be blocked.
- This is a dynamic kind of order; it can be regularly updated so as to minimize circumvention. Various procedural safeguards are incorporated in the orders: the ISPs can apply to set aside or vary the order in the event of a change of circumstances, users and website operators can also apply, information about the block must be displayed; there is a sunset clause.

Coming now to the decision in *Cartier v. Sky* in the Supreme Court, the issue here was about costs. The practice that had been adopted by the High Court in the copyright cases prior to *Cartier* and in the *Cartier* case itself was to order the rightsholders to pay the costs of an unopposed application (and subsequent monitoring) and to order the ISPs to pay the costs of implementation (and subsequent updating); the ISPs were also ordered to pay the costs of contesting the application when they did so in both *Newzbin 2*⁸ and *Cartier*.

The Court of Appeal by a majority upheld the order for the ISPs to pay the implementation costs.

The Supreme Court unanimously reversed on the question of the marginal costs of implementing the injunction, saying that the rightsholder should pay those marginal costs and not the ISPs; but otherwise affirmed the costs orders made by the High Court.

⁸ Twentieth Century Fox Film Corp v. British Telecommunications Plc [2011] EWHC 1981 (Ch).

The reasoning of the Supreme Court can be simply summarized into three propositions.

- First, they said that Recitals (59) of the InfoSoc Directive and (23) of the Enforcement Directive left the question of who should pay the costs of implementing such orders to national law.
- Second, they said that the ISPs were innocent parties; they haven't committed any legal wrongs.
- Third, they looked at previous jurisdictions under English law where this kind of order had been made, in the sense that it was requiring innocent parties to help rightsholders against wrongdoers, *Norwich Pharmacal*, *Bankers Trust*¹⁰ and freezing order jurisdictions in which compliance costs of innocent parties were paid by the applicant but recoverable from the wrongdoer.

At that simplistic level, the reasoning I would suggest is compelling. However, there is a little bit more to the story. For example, two factors which the Supreme Court simply did not consider are that ordering ISPs to pay implementation costs has two key benefits: (1) it avoids the need to quantify the ISPs' marginal costs, and hence evidence and argument on that issue; (2) it gives the ISPs an incentive to be efficient, to innovate, and to cooperate with rightsholders.

The last topic is a more recent development in my jurisdiction, which is injunctions requiring ISPs to block streaming servers. There has been a series of cases since July 2017 in which ISPs have been required to block IP addresses of servers used to stream infringing copies of live broadcasts of Premier League and UEFA football matches and boxing matches. It could of course be any other subject matter, but these have been the ones that have been applied for so far.

These orders are quite interesting. They set out criteria, some of which are confidential, for compiling a rolling list of servers to be targeted. The orders provide for those targeted servers only to be blocked specifically for the duration of each match (the block comes on when the match starts and it goes off when the match stops), so it is highly targeted. There is an additional procedural safeguard that the hosting providers which host the targeted servers must be notified of the order and can apply to set it aside.

The evidence filed in support of later applications in this series of cases shows that the orders are very effective. By agreement between the parties, all of the orders granted have contained no order as to costs. There may well have been private agreements between the parties, but those of course have not been disclosed.

Thank you very much.

PROF. HANSEN: Thank you, Richard.

So are ISPs innocent parties?

MR. JUSTICE ARNOLD: On the current state of the law yes, but that may change because of course there is room for a possible argument to the effect that they are liable for communication to the public. At the moment that argument would be liable to fail, but it could change in the future when we get the decision of the Court of Justice of the European Union in the forthcoming *YouTube*¹¹ case. If they hold that YouTube is communicating to the public, then you might then perhaps extend that onto ISPs. But I think it's doubtful.

And, of course, you then have to factor in the effect of the safe harbors in the eCommerce Directive, and so it gets quite complicated.

⁹ Norwich Pharmacal Co. v Customs and Excise Commissioner [1974] AC 133.

¹⁰ Bankers Trust Co. v Shapira [1980] 1 WLR 1274 CA.

¹¹ Plaintiff v. YouTube LLC and Google LLC [2018], Bundesgerichtshof, Case No I ZR 140/15 (This German case has been submitted to CJEU).

PROF. HANSEN: Where is the United Kingdom compared to other countries in the European Union on website-blocking injunctions?

MR. JUSTICE ARNOLD: We were not the first to grant website-blocking injunctions in the European Union, but we were second or third, and we certainly blocked more websites more quickly than most other countries. There are still countries in the European Union that have not yet granted blocking injunctions, although as time wears on more and more have. So far as I know, we are the only country that has done streaming server blocking so far, although I believe there are other countries where that's forthcoming soon.

PROF. HANSEN: Do you think that the law in the United Kingdom is going in the right direction?

MR. JUSTICE ARNOLD: Well, since I granted most of the orders — [Laughter] — I think the answer to that is obvious.

PROF. HANSEN: So you're "the man" then, right?

MR. JUSTICE ARNOLD: In the sense that I'm the person responsible, yes.

PROF. HANSEN: Okay. Any thoughts, comments?

QUESTION: Thank you. I'm David Tan from the National University of Singapore. I just want to offer the perspective from Australia and Singapore.

In Singapore last year the High Court awarded a dynamic injunction, the same way the United Kingdom has, so I believe some of the U.K. decisions were referred to with approval. The short of the *Disney/Paramount Pictures*¹² case is that a number of studios wanted a dynamic injunction; so once the website changes, the parties do not need to go to court, they just have to sign an affidavit; unless the ISP challenges that, and then you go back to court again. On the contrary, in Australia the Federal Court had declined a dynamic injunction, so each time the website changes, you have to go back to court again.

So I don't see much convergence in other parts of the common-law world. It's an interesting space to watch.

MR. JUSTICE ARNOLD: Yes. Well, my comment on that would be twofold.

Firstly, as regards the question of a dynamic injunction, it is absolutely essential in these types of cases. A static injunction is completely worthless because it will be circumvented within minutes. Therefore, unless you keep the injunction updated it has no efficacy at all. It is easily circumvented even if it is updated, but nevertheless if you keep it updated, then it does have a deterrent effect to the casual users of the targeted websites, and therefore does have some effect which is worthwhile.

As regards the common-law response more generally, as I expect you are aware, both the Canadian Court of Appeal and the Supreme Court in the *Equustek* ¹³ cited the U.K. decisions and that had, I think, some degree of influence in the approach that was taken by those courts.

PROF. HANSEN: Anyone else have a question?

QUESTION [Stephen Burley, Federal Court of Australia]: The process of granting dynamic injunctions is easier in Australia than it might sound because it's largely a procedural step. When additional websites are found, affidavits are provided and orders could be made in chambers, so it's not regarded as a huge impediment to the grant of additional orders.

MR. JUSTICE ARNOLD: That's good to hear.

PROF. HANSEN: Other questions?

¹² [2018] SGHC 206 Originating Summons No 95 of 2018.

¹³ Google Inc. v. Equustek Solutions Inc., [2017] 1 S.C.R. 824.

QUESTION [Angus Lang, barrister, Australia]: I think that the analogy that's drawn by the Supreme Court with *Norwich Pharmacal* shows a significant difference from that kind of relief, which I believe is related to an ancillary claim for relief which otherwise is expected to be brought in the court, the court having jurisdiction for that. But in this type of website-blocking relief there is no anticipated further relief that is being sought. One is just using a sort of equity rather than a specific statutory provision in Australia. It's a significant addition, I think, to the jurisdiction of the court.

MR. JUSTICE ARNOLD: I entirely agree, and that's precisely the reasoning that I gave for not following that rule when I made the cost orders that I did. As you say, although superficially the analogy with *Norwich Pharmacal* looks compelling, in reality the cases are rather different, for exactly the reason you give. That's why I came to the conclusion that it wasn't right to follow that precedent, as had been argued, but the Supreme Court unanimously took the other view.

PROF. HANSEN: How often is the Supreme Court in the United Kingdom wrong? [Laughter]

PROF. JACOB: More than it used to be. [Laughter]

MR. JUSTICE ARNOLD: But, Hugh, as you know, they are right, and they are right because they are final.

PROF. HANSEN: You know, Richard, I'm a little disappointed that you just don't say "they're screwing up," but I think we can read that into the situation.

Dave, would you like to say something?

MR. KAPPOS: I have a follow-up question for Richard. If you scope up a bit, I look at the blocking injunction issue in the United Kingdom as fitting into a context including the recent ambitious new Copyright Directive at the EU level. Setting aside Brexit issues now, I just wonder if you could comment. It feels like Europe has really taken the lead in general in championing the rights of creators and creative interests and asking those companies that are making huge amounts of money by using the creative output of others to start to step up to the table and play a role in compensating creatives.

Can you comment on that? Is that sort of the larger picture that's going on in Europe, or what is going on?

MR. JUSTICE ARNOLD: Well, it's a contested area in Europe as it is throughout the world. I can say that in Europe there is a fair degree of consensus, not by any means complete, that there needs to be a balance between the interests of rightsholders, the interests of users, and the interests of exploiters of copyright.

Now, striking that balance is not an easy thing to do, and I think we've all learned throughout the world more as time has gone on about what may be good ways and what may be bad ways. But certainly in Europe we have been trying to strike a balance in a way that doesn't simply mean ignoring the interests of the right owners but factors in those interests in a proportionate way.

As to the impact of the new Digital Single Market Directive,¹⁴ I think that very much remains to be seen. It is an incremental measure. It is not in any sense a radical change. It is an effort by European legislators in part to consolidate what has already been done through the case law and in part to move it forward a little way.

But I don't think you can expect any major changes overnight. It is a further step in the direction of encouraging platforms in particular to do a little bit more.

PROF. HANSEN: Thank you very much.

¹⁴ Directive 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market.

Dave Kappos is next. Dave, you've been coming to this Conference quite often.

MR. KAPPOS: Yes, for a long time to be sure.

PROF. HANSEN: Tell us a little bit about your background.

MR. KAPPOS: I worked in industry most of my career, twenty-six years at IBM.

PROF. HANSEN: Is IBM still the company it used to be? When you left, it sort of went down a bit.

MR. KAPPOS: I don't know about that. I think, like every other company that is trying to remain relevant and at the leading edge of technology, they all change, they rebalance portfolios, and you see that continuously.

PROF. HANSEN: And then what did you do?

MR. KAPPOS: I worked in the government for a while.

PROF. HANSEN: You know, this is almost like pulling teeth — "I worked in the government," "I was in industry." What did you do in the government?

MR. KAPPOS: I helped look after IP interests for a time. [Laughter] I got to work with David Carson and a lot of really talented people at a great agency.

PROF. HANSEN: So for a while you were the Director of an organization — which organization was that?

MR. KAPPOS: It's called the United States Patent and Trademark Office.

PROF. HANSEN: And how was that as an experience?

MR. KAPPOS: Great, best job I ever had.

PROF. HANSEN: Then why did you leave?

MR. KAPPOS: There comes a time, and, as I think someone else mentioned last night, you want to leave jobs while things are going well rather than being shown the exit.

PROF. HANSEN: And how is it doing since you left?

MR. KAPPOS: I think the Office is doing great, and I applaud the leadership there and the career folks. They are doing a great job.

PROF. HANSEN: Great. Okay. Thanks so much. Go ahead.

MR. KAPPOS: What I'm really here to talk about for just a few minutes today is something that follows well from both Bryan's and Richard's comments, both of which have touched on injunctions, but I'm coming back to the patent world more generally and what is going on in the United States and changes in the grant rate and availability of injunctions. I will discuss this trend that has formed and what I think are probably the root causes of it — but we could debate that or discuss it; we're all here to do that — and then a few brief comments on the current landscape of injunctions.

To go directly to the punchline, permanent and preliminary injunctions in the United States have become significantly less available in the last couple of years, especially as in the last year. This is something that hasn't been widely reported, although I'm starting to see some reporting about it.

These are Lex Machina data that only go back to 2016, but I think if they went back further what you would see is that injunctions were at sort of a steady-state, status quo rate, possibly on a general incline. Despite the fact that patent lawsuits, as many people in this room know, have been going down steadily for the last nearly decade now, injunction rates had been very stable, and then suddenly dropped off a cliff last year with many fewer being requested and many, many fewer being granted.

That would alert you to ask the question: What exactly has happened?

I think part of the answer is that the *eBay* case back in 2006 was a sea change in the granting and consideration of injunctions in the United States. But that of course can't be tied to a sudden drop-off in 2017 and 2018. So what can be tied to that?

What happened more recently was the 2012 decision in *Apple v. Samsung* where the Federal Circuit first articulated the so-called "causal nexus" test. ¹⁵ Remember, this was a case in which Apple had shown that Samsung infringed six patents that were found to be valid and the district court denied Apple's request for a permanent injunction. The language in that decision that became sort of enshrined at the Federal Circuit level in the causal nexus test was "To establish a causal nexus, Apple would need to show not just that there is demand for the patented features" — boy, there's a lot of demand for their patented features — "but that the patented features are important drivers of consumer demand for the infringing products." ¹⁶ So this is a brand-new test.

The Federal Circuit has tried not once, but twice, to clarify its causal nexus standard, to maybe walk it back. In 2015 the Federal Circuit stated that a patent owner need only show "some connection" between the patented features and the market demand (i.e., an "impact" on consumer demand is sufficient). ¹⁷ More recently, in 2017, in *Genband US LLC v. Metaswitch Networks*, following a district court's denial of a patent owner's permanent injunction request on the grounds that irreparable harm was not established, the Federal Circuit again clarified its "causal nexus" standard. ¹⁸

Well, since then, as I chart things, the district courts have interpreted that test increasingly narrowly. Looking at just a few of the recent cases so you can get a sense of how things have developed from causal nexus, and the efforts by the Federal Circuit to clarify that, through the sudden sort of a cliff dive that we've seen in 2017, really in 2018, Just look at a couple of district court cases.

Ecoservices LLC v. Certified Aviation Services is an example: the district court there said that despite its patents having been held valid and infringed, the plaintiff Ecoservices did not suffer irreparable harm because it cannot tie its lost market share and its lost sales directly to the defendant because there are other competitors in the market. So now you've got a situation where if there are other competitors in the market you can't get an injunction? How is that supposed to work?

And then the court also in that case said that they couldn't show that Ecoservices would have been able to retain its original price but for the defendant's infringement of its patents. Well, again, you're almost never going to be able to show something like that. So a test has been set up that is going to cause predictably injunctions to go over a cliff.

Lastly, I will just mention another case, *Verinata Health, Inc. v. Ariosa Diagnostics, Inc.*, in which the district court again found the patent to be valid and infringed but declared that Verinata Health would not suffer irreparable harm because there is no direct competition between the plaintiff's and the defendant's products.²⁰ Again, how does that necessarily matter to getting an injunction? I don't get it. It's just a reason not to grant one.

Monetary damages would be sufficient to compensate for an infringement — okay, that also never was really the test but now it becomes part of the test — so you wind up

 ¹⁵ See generally Apple, Inc. v. Samsung Elecs., 909 F. Supp. 2d 1147 (N.D. Cal. 2012).
 ¹⁶ Id. at 1156.

¹⁷ Samsung Electronics Co., Ltd., Samsung Electronics. Am. LLC v. Apple Inc., 780 F.3d 1159, 1168 (Fed. Cir. 2015).

¹⁸ See generally Genband US LLC v. Metaswitch Networks, 861 F.3d 1378 (Fed. Cir. 2017).

¹⁹ See generally Ecoservices, LLC v. Certified Aviation Services, LLC., 340 F.Supp.3d 1004 (C.D. Cal 2018).

²⁰ See generally Verinata Health, Inc. v. Ariosa Diagnostics, Inc., 329 F. Supp. 3d 1070 (N.D. Cal. 2018).

then with what we are seeing, which is district courts finding basically every reason that's available to deny access to an injunction.

I'll stop there. Hugh, I'm happy to have questions or a discussion.

PROF. HANSEN: So, basically, there's no disincentive; I should just infringe, because the worst thing that is going to happen is that for a while I get a cost-free license and after that I just have to pay. So there's almost no incentive to someone to actually get a license, is there?

MR. KAPPOS: I think that's exactly right. And that plays into the now-popular "efficient infringement" phenomenon, which is another nice way to say blatant disregard for the law. It's as if someone can walk into your apartment here in New York City and say, "I'm just going to sit on your couch; is that cool with you?" and if you say, "No, it's not cool with me," then they say, "Well, all right, fine, so bring me to court and after you spend millions of dollars doing that maybe I'll have to get off your couch," but there's no other consequence. It's not a good state of affairs for the U.S. IP system.

PROF. HANSEN: Yes, I think the *eBay*²¹ case was an example that the Supreme Court often doesn't have a clue but is earnest and trying. That was a period in which there were a lot of bad patents. Now, one of the problems was you would go to patent people and they'd say, "No, everything's okay, everything's okay." So the view became of laypeople, the salt of the Earth, that *They can't fix it internally through patent people or whatever and we have to intervene*. So in *eBay* the Court said: *Okay, you know, bad patents. We're going to leave it up to the district court. If it's a good patent, we all know they'll grant an injunction. If it's a bad patent, they won't.* This was the backdoor way to solve the problem.

Justice Thomas wrote the *eBay* decision, who supposedly was a Framers' originalist. Scalia was on the Court. Not once did they mention that the Constitution says Congress can only grant protection, exclusive rights, for patents and you don't have an exclusive right if there's no injunction. So the whole thing, I think, was *Oh*, we'll try to fix this thing, and the Supreme Court thought they were clever.

But then it just goes on and has a life of its own, and somebody has to correct it. So the question is: Is it correctable?

MR. KAPPOS: Well, that's a great question. I think it is. Unlike Section 101, which requires congressional action, this area probably is really best corrected by the courts really stepping in and clarifying, backed up by the administration.²² I think the USPTO has been doing a good job, and I think the Department of Justice Antitrust Division has also been doing a really good job, talking about the need for the exclusive right to really be exclusive and to be treated as a property interest. I think if you have the administration working with the courts this problem can be fixed.

MR. JUSTICE ARNOLD: There was another reason for the decision of the Supreme Court, which was that the Court of Appeals for the Federal Circuit prior to that point had established a rule that injunctions were essentially automatic. The key point that the Supreme Court was making, surely, was that injunctions should not be automatic, and that surely is correct.

But, on the other hand, you do not want a denial of an injunction to enforce compulsory licensing in circumstances where a compulsory license is not available. That's where you need to strike the balance.

So you need to have a rule that says, "Yes, we decide on a case-by-case basis whether an injunction is proportionate, and therefore it's not automatic; but, on the other

²¹ eBay, Inc. v. MercExchange LLC, 126 U.S. 1837 (2006).

²² 35 U.S.C. § 10.

hand, we don't simply have *de facto* compulsory licensing." And I would suggest that is correct.

PROF. HANSEN: But once you do that, Richard, it's a slippery slope. It's injunctions all the time — well, of course there are injunctions all the time; it's an exclusive right. You don't have an exclusive right if you can't depend on getting an injunction. So the idea that *Oh no, we're going to take that away* — as soon as you take that away, it's a crap game of what's going to happen. You know, proportionate this or that, it's just the eye of the beholder. So it's a dangerous situation if you really want continued protection, in my view anyway, for patents. And you do, too, don't you?

MR. JUSTICE ARNOLD: Of course, in the ordinary case I grant an injunction, but I have denied an injunction in the case of a life-saving medical device. And who wouldn't?

MR. ANDERSEN: I would add from my perspective it is helpful for people like David to show the statistics. I would agree with the notion that some of this is correctable by academic research and education and understanding what are the effects that are going on and what the case law looks like.

The thing I would say, though, is that to me the courts are going through a very rational process here. I can remember the mid-2000s when the *eBay* case came out, and you did have a situation, viewing it from a corporate perspective, where at any given time we were facing well over 100 assertions by various nonpracticing entities, very often financed by hedge fund investors or financed by plaintiffs' law firms. At the time there were thousands and thousands and thousands of bad patents out there, and it was just like a lottery game.

A lot of these patents were very weak patents — or even if they were strong patents — that were in the nature of very, very minor features that were not driving any sort of consumer demand, but it would have been very difficult to pull out of a product because of backward compatibility concerns.

So I think that over time courts have looked at that factual situation and have developed tests around the economic balance between somebody who has a very weak patent or a patent that really is not economically significant but who is trying to get an injunction on that against a major corporation that is serving consumers on a worldwide basis, and they are, I think appropriately, asking questions about whether or not that's the right result.

PROF. HANSEN: So how do you fix bad patents?

MR. JUSTICE ARNOLD: You start by having a rational costs regime. The problem you have is that the loser doesn't pay the costs of the suit. As soon as you have that rule, then a lot of the incentive for that kind of bad behavior goes away.

MR. ANDERSEN: I think it's two things. One is I think patent quality is really paramount. Like Dave, I commend the people working in the USPTO and other agencies around the world who are focusing on that problem.

I do think, though, that the courts do play a role in asking the second-tier question, which is: what is the relationship between the patent being asserted and the marketplace and the product overall, and the consumers as well?

PROF. HANSEN: Okay, good. Thank you very much. That was a pretty darn good discussion, wasn't it? I'm going to give you all at least an A-minus so that the next one we can try even harder. But that was great.

The next speaker is Sir Robin Jacob. How are you doing?

PROF. JACOB: I'm pretty good.

PROF. HANSEN: You were a judge for how many years?

PROF. JACOB: Seventeen.

PROF. HANSEN: And for how many were you a barrister?

PROF. JACOB: A lot.

PROF. HANSEN: And you were a Silk, or whatever it's called, for how many years?

PROF. JACOB: A Q.C. for twelve years.

PROF. HANSEN: So you've been a regular barrister, a Q.C., a judge in first instance, a judge in the Court of Appeals. What was your best job in your whole life?

PROF. JACOB: Actually, I reckon it was the very early years of being a barrister. For the first time I realized, "I can actually do this." I've missed every job I've stopped doing, but I think that was the best.

PROF. HANSEN: When a case came to you when you were in first instance, let's say, how quickly did you determine (in seconds) who should win and should there be an injunction — because you know everything, right; you've been through it, and it's just a question of letting these people speak for a little bit and you will then solve the problem; correct?

PROF. JACOB: I didn't make the mistake of trying to read the papers too much in advance for several reasons. [Laughter] One is because quite a lot of cases settle and it would have been a waste of my time. Secondly, if you did, you'd have to get yourself thinking, *These are the good guys and these are the bad guys*. I reckon I changed my mind quite a lot in cases.

PROF. HANSEN: Richard, the same with you?

MR. JUSTICE ARNOLD: My policy is always to try and defer the decision until I see where the reasons take me. So, as a matter of deliberate policy, I always try not to think who is going to win until the end of writing the judgment and see what result the reasons produce. It's an intellectual discipline.

It's easy sometimes to think the answer is obvious from the word "Go." But, generally, the cases that fight are the ones where the answer is not obvious and where there are arguments on both sides. I, therefore, prefer to write down the reasons and then find out what the result is.

PROF. HANSEN: Did you also have more fun as a barrister than as a judge?

MR. JUSTICE ARNOLD: Like Robin, I spent time as a part-time judge before I became a full-time judge. After five years doing it part-time, I figured out I was enjoying judging more than I was enjoying barristering, so I thought the answer was obvious that I should do this full-time.

PROF. HANSEN: Good.

Robin, are you going to speak about something today? Go ahead.

PROF. JACOB: My subject is an ill-principled subject. It goes by the name of "exhaustion of rights" in Europe, "first-sale doctrine" in the United States. I intend to justify that "ill-principled" epithet, show why it really matters; in more detail why it's about national rules to control international trade; and why it is not sensible to work out rules for exhaustion/first-sale by type of IP right. The rules should be holistic; and I'm going to say it's time there was actually serious international consideration of what the rules should be. Judges are not the right people to do it.

When I started in IP, some twenty-four years before the first Fordham Conference, I had never heard of the expression "doctrine of exhaustion." The word "exhaustion" was no part of English IP law. The rules about subsequent trading in goods first sold by the IP owner — or with his consent, by a licensee, for example — were judge-made and they were founded on principle. The principle was based on IP being an exclusive right and so

the owner of the exclusive right was entitled to say what could and could not be done within the scope of his right.

For patents the rule was that when a patentee sold his patented article, the customer normally would expect to be able to do anything he liked with what he had bought. If he'd bought sausages, he could sell the sausages. The same with patented goods. It didn't matter where he bought it and it didn't matter where he could sell it. It wasn't because any right had been exhausted. It was because in an ordinary contract of sale that's what you would expect. Unless the buyer is told there is some special condition, there isn't one.

The law said there was an implied license that ran with the goods. The solution was licensing; and, because it was licensed, the patentee could change it, he could limit it; and he could limit it not only against the first acquiror of the goods but against subsequent acquirors, provided he gave notice in such a way that it was brought home to subsequent acquirors they couldn't sell.

There was no imposition by law of "exhaustion" or "first sale" on the patentee's rights. This wasn't just a matter of international trade; it was also a question of national trade. Patents were used for resale price maintenance of phonograph records, for example: you couldn't sell records marked with a minimum price and if you did, you were an infringer. That's how it was done. Unthinkable now that competition law has had a go and resale price maintenance was forbidden. But that's not a question of patent law; that's imposing another rule on top of patent law. It was called label licensing.

In copyright a similar rule applied that was even stricter in some ways: if you licensed for a particular territory, the goods could be made in that territory but they couldn't come out and go somewhere else. That is how the world's record industry worked. That is how copyright was used by publishers.

Trademarks were and are now more complicated intellectually, because a trademark is a badge of origin. Kodak film made in Rochester, New York, when I was a boy was exactly the same Kodak film that was made in Hemel Hempstead, Hertfordshire, England. It was Kodak film. So if you bought it in USA, why not bring it in? Not because it's licensed, exhausted, anything — just simply because it is Kodak film.

If you go to non-exhaustion, or if you even get to the point which our European Court of Justice has done, to say you can't even import something which used to have the trademark on it into the European Union — Mitsubishi forklift trucks. You are illogical in trademark terms.

Simply saying, "We are going to say this is exhaustion," without a principled basis you have to ask "what are the rules for deciding whether something is exhausted, and are they rational? And should they not be the same around the world?" It matters a lot. Let's take a couple of examples.

Big pharma decides it is going to give drugs away at cost in a Third World country because that is the only way they can ever afford them, it gives big pharma a good name, and they are never going to make any money out of such a country anyway. It only works if the drugs that go to that country stay there. And how can you make them stay there? With a patent to stop them coming back into the First World. You could use a trademark, or you could use copyright in the label design or the instructions.

Another example: publishers make books specially available, possibly cheap educational books, for the Third World. It's no good if they'll keep whizzing back into the shops around this university.

Now then, different countries have different rules about exhaustion. You don't develop your rules by looking at what some other country does. And they may be different for different types of IP — copyright may be different from patent. And that's not

surprising because there's no principle involved. You simply say "it's exhaustion" or you don't.

We need rational rules. I'm going to suggest that the rational rules should be something along the lines that there should be a default position that there is worldwide exhaustion. I don't think we would ever go back to the more rational license system. It is too late. But there should be a system of rational exceptions crafted by the kind of product, not the kind of IP right. Pharma gets a special rule if it is made available cheaply somewhere — educational books and other ones — and you would have to justify the exception. That is what I'm suggesting ought to be done. Will it happen? No.

I'm done.

PROF. HANSEN: Okay. All right. Questions, comments, thoughts?

MR. ANDERSEN: I could not agree more with what you're saying. I think that, despite the fact that first of all many people in the audience are making a good living off of analyzing exhaustion issues, it has always struck me as being something that is illogical as well.

I worry about exhaustion also just creating opportunities for gamesmanship. What I see very often is that exhaustion analysis will lead you to a conclusion about where you would need to make an assertion, let's say, in order to achieve your end result from a commercial perspective. However, it might not be at all where you actually think the assertion should be logically based upon your business model, but it's simply exhaustion drives you to that end result.

And then, I see instances where if someone has to make an assertion in the logical place in the supply chain in order to maintain intellectual property rights, very often you will see people gaming that by sort of playing the victim — "Why are you coming to me? Maybe I need to go talk to my government. This is unfair" — where I think people of sophistication, which is typical in the tech world, know very well exactly what is going on and why it is that things are playing out the way they are.

You have this "duck and dodge" game that goes on based upon the fact that exhaustion drives you to a certain end result, but then people can act as though they are confused or do not understand why things are happening to them.

MR. JUSTICE ARNOLD: Robin, you said that judges were not the right people to decide this, and I see the force of that point. But it follows from what you say that we require an international solution because if different countries adopt different rules, then you are simply extending trade wars by a different means.

So will we require an international treaty? That would seem to suggest we need an amendment or a supplement to TRIPs. Is that what you envisage?

PROF. JACOB: Yes, or some other way of doing it. I think this is such a big subject, it is so important for some fields — it matters not tuppence in others — that this "individual country/individual right" type of analysis is simply producing a rather chaotic position. When you get parallel rights, you may say, "Well, there is exhaustion of one kind of right but not of the other," and so you can stop the product coming in. It doesn't fit.

It has all happened because exhaustion of rights/license or whatever is a kind of add-on. It's toward the back of every IP book. You may not get involved in it, but then one day it turns up and you have the odd case.

But out there in the real world it really matters, particularly for publishers and the like. Book publishers do not go to court very often, but they are very concerned about rules in relation to this because it really matters to their entire business model and to their publishing.

PROF. HANSEN: Okay.

MR. KAPPOS: Robin, let's just take that a little bit further. We've had two major decisions on exhaustion coming out of the U.S. Supreme Court in the last decade, in my opinion both disasters.

There was the *Kirtsang v. John Wiley & Sons, Inc.* decision in copyright.²³ You talked about that. We are talking about book publishers and clever people in places, like in that case in Thailand, arbitraging textbooks.

And then, more recently, the *Impression Products v. Lexmark*²⁴ decision, the business model in which a company says, "You can buy my printer cartridge and you can take it for one price and then return it anywhere you want, or we'll sell it to you for a lower price if you want to return it to us," and that business model has been wiped out by the Supreme Court in the exhaustion doctrine.

Can you just comment on how the Robin Jacob rule would come out in those two cases?

PROF. JACOB: Suppose the rule is simply that there is international exhaustion unless the right owner can justify non-exhaustion. Then you would say: "Look, this is my business model, it's a working business model, it's a very good model, so leave us alone." But I doubt that an international treaty could be as woolly as that.

We have some woolly rules like that in Europe. We have exhaustion within the European Union for a political reason — common market. You cannot use IP rights to divide the common market. They got to the point where they even said, "Even if you haven't exhausted a right, if you put it on the market where you have no patent, that's enough." So if you didn't have a right at all in the place where you put it on the market, it was still exhausted when it bumped up against patents in other countries.

It seems to me that if either you make a detailed list of things you can have or you have a more general rule which courts have got to apply saying, "There is international exhaustion unless ——" and if there's a good business reason why that is so, why there should be, then you say, "Right, there's no exhaustion."

MR. KAPPOS: So would you have said there were good business reasons in *Kirtsang*?

PROF. JACOB: Yes, exactly.

MR. KAPPOS: Okay.

PROF. HANSEN: Thank you very much.

The next speaker is Erich Andersen from Microsoft.

Erich, your bio says "corporate vice president and chief patent counsel." How much time do you spend as chief patent counsel and how much time do you spend being corporate vice president?

MR. ANDERSEN: Actually, my title is Chief IP Counsel, so it's more than patents. Wow! Maybe 50/50, I guess. It does seem like many days my job feels like it's running a business, and then many other days it feels like I'm being a lawyer. So it really depends on what's going on at any given time.

PROF. HANSEN: Years ago, Open Source were these radicals who wanted to take the whole system down and actually IP protection was viewed by them as not a good idea, and now it seems like open source is coming to where people can choose to use it or not use it, even people who believe in IP. It is a very interesting development. I'm very much looking forward, Erich, to what you're going to say about this.

MR. ANDERSEN: Thank you very much.

²³ Kirtseang v. John Wiley & Sons, Inc., 568 U.S. 519 (2013).

²⁴ Impressions Prod., Inc. v. Lexmark Int'l, Inc., 137 U.S. 1523 (2017).

Open source licensing is obviously very important to the technology world, but it is also very, very important these days in many other fields — financial services, pharma, retail — and a lot of these companies are built on an open source foundation. I think there is the perception that open source is sort of this monolithic thing, it's binary: either you are creating technology that is proprietary or you are creating technology that is open source.

That is really not the case. I would say that what is going on in the tech world is evolving. I want to comment briefly on two paradigms that I am seeing that I think are important trends.

There are a couple of business models that are emerging that I think are important to understand.

The first one, on the left here, is the open source "core" paradigm, which is increasingly popular. This can be simply understood as essentially a proprietary business model built on free open source core. The most obvious example today would be Android. Android is basically a proprietary technology but it is built on top of open source core. There's a Linux kernel; there are many other open source libraries, run times, etc., that are the core of that technology; but the up-stack so to speak from there is it is all proprietary technology and the applications and services are proprietary as well.

That is increasingly the business model being embraced throughout the technology world and also, as I say, in other areas of business.

The other paradigm that I really want to talk about is a fairly recent development. Let's call it Version 2 of the Red Hat approach.

Many people are familiar with Red Hat, a very successful company in the process of going through an acquisition by IBM. Essentially, Red Hat's business model was to be very respectful of open source licenses and governance relating to open source, relating to Linux and some of the core open source technologies around Linux. They built a business model around Red Hat Linux and then a bunch of other open source technologies where, in essence, they have the protection of some trademarks, and then they will put together a package of an update service for companies that people, enterprises in particular, find very useful and that they are willing to pay for.

Well, in recent months companies that went out with a similar business model — notably two companies called MongoDB and Redis — were cycling down the same path, and they started to recognize that they were facing a real fundamental challenge to their business model.

The challenge that they were seeing was that one of the quirks or one of the legacies of the open source licenses is that they are like classic copyright licenses. The action that the licensee takes in order to trigger a bunch of obligations is the distribution of a derivative work, of the technology, and that would trigger the obligation in many cases, depending upon the license, to contribute back derivatives of the underlying technology, etc.

They found that the emergence of large cloud platforms called that into question. Most notably, at least in the case of MongoDB, there was kind of a showdown with Amazon over the fact that Amazon was essentially running a service with the MongoDB technology in the cloud. Amazon was not as a technical matter distributing the software, but they were running it in its data centers and thereby essentially skirting some of the obligations that might have been otherwise adhered to in using the technology and distributing a derivative work.

We have now seen MongoDB, Redis, and other companies internalize the change in the business model and move towards one where they have a bifurcated model, where there is a proprietary approach where they make money and then there is an Open Source approach, to try to directly address this phenomenon.

The second thing I wanted to point out briefly here is another big trend that is going on, which is the application of open source business models to artificial intelligence (AI). In the big data world, so to speak, open source has really taken hold in a major way. There are major machine learning platforms that are now being provided under open source licenses. The three here most notably that I'll point out are:

- OpenAI is a nonprofit founded by Elon Musk and a lot of other luminaries in Silicon Valley, where there's a huge machine learning model, very sophisticated, that is provided under an open source license. I believe it's the Apache license, but it might be the MIT license.
- Likewise, in the middle, Google has the very popular TensorFlow project, which has many variants to it. The BERT project is one that is embedded inside of that, which is like OpenAI.
- Finally Microsoft has MT-DNN, which is a very nerdy research-ey name, that it is more conventionally known as "Big Bird." There seems to be a *Sesame Street* theme to a lot of these releases.

This is an area to watch that's important in the open source world, and it will be interesting to see how open source licenses and governance are adapted to this new area, which is again not like the usual distribution of Linux in the past.

Thank you.

PROF. HANSEN: So the future with AI and open source will eradicate life as we know on Earth almost completely, I imagine — or not?

MR. ANDERSEN: I think part of the goal here of providing the source code behind these massive AI machine learning algorithms is to provide a level of transparency about what is going on, and frankly give the research community and the commercial community an opportunity to train those models in a way that is socially useful and socially beneficial.

I recommend people go to the OpenAI website where its mission statement talks about their aspirations of being able to have an approach where they are creating technology that benefits the world and is useful. That's their aim at least.

PROF. HANSEN: Okav.

MR. JUSTICE ARNOLD: A lot of the important aspect of AI, as everybody knows, is not the software but the data. Is there any move towards an open source model for dealing with the data?

MR. ANDERSEN: That's a great point. There are actually two parts to the data question that you're raising.

One has to do with the data input into AI, which are the training data so to speak, and there is a real big movement afoot to try to create licenses there. Obviously, there are huge amounts of troves of public data that exist in the world. A lot of the research that we have done on data that is used to train models that is not so-called public data is very ad hoc at this point. The licenses are very much bespoke for the specific process.

In these particular examples you also have the so-called machine learning model, which is basically an AI algorithm, and then you have a separate database of weights and parameters that is the output of the training process.

What is interesting is that the data output of the process is also governed by these open source licenses. But I see it as an imperfect fit. The license doesn't actually work very well with the weights and parameters data that come out of these processes, so I expect to see that evolve.

MR. KAPPOS: Erich, I wonder if we could take that part about data a little further. As I think about the data we are talking about here, there is no protection regime for it other than trade secrecy.

The EU Database Directive²⁵ didn't really work very well, and certainly doesn't apply here. The open source licensing model, like the open data license that the Linux Foundation is working with, seems like it's fine as a partial solution.

Could you comment on how we transact in data and how we treat data going forward? Given how important it is — we're all agreed here — but given that it really lacks an effective regime covering it in the IP world, maybe none is needed, and I'd love to hear about that too.

MR. ANDERSEN: Yes, it's a big topic, David.

Let's start with some taxonomy. There is obviously a huge amount of what we could call public data in the world, government data, etc., that really does not have constraints on it. Then there is the middle category of data that exists out in the world, on the Internet, for example, Flickr photos and things like that. Then there is data that is secret, that is not being shared by anybody, but that is interesting or useful in an AI context. I think in each one of these areas we are going to see reform and development over time.

In the first category, in the United States the federal government passed the OPEN Government Data Act²⁶ in January 2019 to try to advance data being created by the U.S. government in machine-readable formats.

In the second category, we have seen a lot of activity in the European Union with the Copyright Directive, in what eventually became Section 4, on the ability to do text and data mining on publicly available data. I think this largely brings Europe — if that ends up being the law and if somehow the database law doesn't make some funny return to life — largely into alignment with the United States, although there is probably some gap left over.

The third area, which we see as tremendously interesting, is right now very much a bespoke area, but I expect norms to develop where people start to accept licenses and governance for sharing, and then technologies fundamentally are used in order to train AI with private datasets without the data itself being shared.

PROF. HANSEN: Thank you very much.

Now we have David Carson. David, do you view yourself basically as a copyright person?

MR. CARSON: Yes.

PROF. HANSEN: And you're in the USPTO?

MR. CARSON: Yes.

PROF. HANSEN: Is that like an incredibly lonely place to be? [Laughter]

MR. CARSON: A couple of decades ago it might well have been, but we now have more or less ten folks who are working at USPTO now in copyright policy, so I feel very much at home.

PROF. HANSEN: All right. Good.

You are going to talk about a couple of recent decisions and the future. Please go ahead.

MR. CARSON: Great.

In the past twenty years our Supreme Court has agreed to hear copyright cases on the average about once every couple of years, so it's not exactly a hotbed of copyright litigation, but for many copyright practitioners that's absolutely fine.

²⁵ Directive 2019/790, of the European Parliament and of the Council of 17 April 2019 on Copyright and Related Rights in the Digital Single Market and Amending Directives 96/9/EC and 2001/29/EC, 2019 O.J. (L 130) 92.

²⁶ 44 U.S.C § 262.

Every time the Court takes a case we shudder, since the Court isn't exactly a repository of copyright expertise, and we can sometimes spend decades trying to figure out just what the Court told us when it tried to explain the law to us. So we're fine with having only the occasional case get up there.

This year was unusual, in that on March 4th the Court ruled in two copyright cases, *Fourth Estate* and *Rimini Street*. The rulings came less than two months after the Court heard argument, and they were unanimous decisions.

I'm happy to tell you that from our perspective in the government, the Court got it right in both cases. The rulings were consistent with the positions taken in *amicus* briefs filed by the United States. But there were stakeholders, including a number of copyright owners, who weren't particularly pleased with those rulings.

Both of the cases concerned statutory interpretation. The Court did what it usually, although not always, does in such cases: it actually read the words of the statute and tried to figure out what they meant, and it gave short shrift to policy arguments offered on both sides in support of the respective positions of the parties. It just parsed the words of the statutes, looked at prior case law, and decided what the most reasonable interpretation was.

I don't really have enough time to go through the reasoning in both of the cases, but I think the lesson we learned from these cases — and I'm not sure how much we can generalize from it — is that, at least in these cases, in construing the Act, as I said, the Court just interpreted the plain meaning of the words of the statute and it didn't pay a whole lot of attention to policy arguments.

We do not always get that kind of clarity. Last year, in the *Star Athletica*²⁷ case, the Court looked at the words of the statute. A number of courts of appeals had come up with a large number of different interpretations of what those words meant. The Court sort of cleared away all that underbrush and went back to the words of the statute. Their interpretation was a very close paraphrase of the words that had been confusing the courts of appeals for decades, so we don't know much more now about how to deal with the "useful article" doctrine than we knew beforehand.

But in these cases we got some clarity.

The first case was *Fourth Estate v. Wall-Street.com*.²⁸ The question in that case sounds like a simple one: how do you decide when a registration of a copyright claim has been made?

We actually had a split in the circuits on that. The Fifth and Ninth Circuits had said that a work is registered once the claimant has submitted an application, fee, and a deposit with the Copyright Office. The Tenth and Eleventh Circuits had said it's when the Copyright Office registers the claim, when it looks at a claim and decides whether or not it should be registered and appears in the records of the Copyright Office.

Now, you can make a reasonable argument that the word "registration" means different things at different places in the Copyright Act. It is not always consistent.

The Court actually looked at the words as they appeared in the context of Section 411(a). Section 411(a) says that for a United States work, you cannot file a suit for copyright infringement until the work has been registered or preregistered; you have to wait until that has happened. There is a big difference depending on whether all you had to do is submit an application and then you can go into court or whether you have to wait for the Copyright Office to issue its registration, which can be some months, and in rare cases years, down the road. That is why a lot of copyright owners were arguing that "all we have to do is submit the application, fee, and deposit and we should be able to file suit."

²⁷ Star Athletica LLC. v. Varsity Brands Inc., 137 U.S. 1002 (2017).

²⁸ Fourth Estate Public Benefit Corp. v. Wall-Street.com, 139. U.S. 881 (2019).

The Court looked at the statute sentence by sentence and deconstructed it and concluded that the so-called "registration approach," under which Copyright Office has to act, was the right approach. In doing so, if you look at each sentence, you can figure out how they got there, and they tell you how they got there.

The first sentence, which states the basic proposition, doesn't necessarily tell you a lot apart from the fact that it talks about preregistration:

... no civil action for infringement of the copyright in any United States work shall be instituted until preregistration or registration of the copyright claim has been made in accordance with this title. In any case, however, where the deposit, application, and fee required for registration have been delivered to the Copyright Office in proper form and registration has been refused, the applicant is entitled to institute a civil action for infringement if notice thereof, with a copy of the complaint, is served on the Register of Copyrights. The Register may, at his or her option, become a party to the action with respect to the issue of registrability of the copyright claim by entering an appearance within sixty days after such service, but the Register's failure to become a party shall not deprive the court of jurisdiction to determine that issue.²⁹

Preregistration came into the Act in 2005. I'll confess it was my brainchild. I came up with it when a number of copyright owners came to Congress and argued that the registration requirement should be relaxed because there was all sorts of pre-release infringement going on, sometimes before they even finished creating their works, certainly before they had released them to the public, and they hadn't even filed the application for registration, much less gotten a decision out of the Copyright Office. They wanted those rules to be relaxed so they could go to court without having to register.

Jule Sigall and I, in a visit to the Senate Judiciary Committee, thinking it was going to be a pretty routine meeting, found an audience of copyright owners who were very, very insistent and some Senate staffers who seemed to be very, very receptive. So we pulled out of our back pocket a notion called preregistration and we said: "Look, if this is the problem, let's get a narrowly tailored solution that says that in the case of a work that is being prepared for commercial dissemination but hasn't yet been disseminated, all you have to do is file some basic information with the Copyright Office that gives you a little information about the work, a very brief summary of what it's going to be about, and that is enough to get you into court as long as you register the work once it has been released." That's what happened.

The Court looked at that language and it concluded that the preregistration option tells us a lot about the registration requirement. Why? Because you wouldn't have to have a preregistration option if all you need to do to get into court is to file your application. If someone infringes your not-yet-published work, you can file your application the next day and under the application approach you've registered and you can go to court. So the preregistration option actually had quite a bit of weight in terms of reaching the result.

The Court then looked at the second sentence of the Act, which says: However, when the Copyright Office has refused to register a work, you can then go to court in any event. The Court concluded that sentence has no meaning if you can already go into court before the Copyright Office has even acted.

The final sentence of the statute tells you that once that has happened, the copyright owner must give notice to the Copyright Office so the Office may, if it chooses, intervene to defend its decision on copyrightability. The Court saw this as shedding light on why we

²⁹ 17 U.S.C. § 411(a).

have the registration requirement, why we want the Office to actually rule on the registration, so that the courts get the benefit of the Copyright Office's views on copyrightability before they actually make a decision.

That gives you the gist of how the Court was thinking.

I am not going to have the time to talk about the cases where Certiorari is pending. You are going to hear about two of these if you go to the copyright panels this afternoon and tomorrow afternoon. In the *Capitol Records v. ReDigi*³⁰ digital exhaustion case, certiorari isn't pending yet, but ReDigi has received an extension of time to file a petition. They are all very interesting cases. Perhaps the Court will take one or two of them.

PROF. HANSEN: Thank you.

What grade would you give the Supreme Court in copyright law — not on these two cases, but overall?

MR. CARSON: I'd probably have to give them a C because sometimes it's an Aplus and sometimes it's an F.

PROF. HANSEN: I don't know. You and Richard are in the same boat here. What do you really think? I know you can't do that because you are employed by the USPTO.

MR. CARSON: That puts some constraints on what I say.

PROF. HANSEN: Comments? Thoughts?

QUESTION [Thomas Cotter, University of Minnesota Law School]: Do you think there is any prospect we could just get rid of registration altogether one of these days because it doesn't seem to make a lot of sense to have different rules for U.S. works and non-U.S. works? Of course, the latter cannot be subject to formalities under the Berne Convention, TRIPs, the WIPO Copyright Treaty, etc.

MR. CARSON: I follow that reasoning. The reason that we have that bifurcation between U.S. works and non-U.S. works of course is because when we joined the Berne Convention, we realized that we couldn't require works from outside the United States to go through that formality. You could make an argument that we could maybe, but it would be a difficult one to sustain. However, there is no such prohibition with respect to U.S. works under the international obligations.

It is conceivable we might get rid of it. There are certainly some copyright owners who would love to get rid of it. I wouldn't predict that's going to happen, but you never know.

And I would take issue with the notion that as a matter of principle or policy it doesn't make sense. There is a downside to it if you are a copyright owner and you want to get into court right away. There are certainly costs involved in order to do it. But the registration system is there for a reason, it has always been there for a reason: it's there to make a public record of copyright ownership.

In this day and age, when we have problems with orphan works and when we have all sorts of people who want to use works but can't even figure out who owns them and who controls the rights to them, having a registration system that actually tells you is pretty useful.

I think having the Copyright Office play the role that it plays in reviewing copyrightability so that the courts have the benefit of that makes a lot of sense. You'll hear in the copyright breakout session tomorrow afternoon [Session 9A] Josh Simmons talk about some cases involving dance moves where the Copyright Office made some rulings, and I think the views of the Copyright Office will play a very important role, and justly so, in those cases. Those cases actually had to be dismissed because of the *Fourth Estate* case;

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³⁰ Capitol Records, LLC v. ReDigi, Inc., 910 F.3d 649 (2d. Cir. 2018), *cert. denied*, 139 S. Ct. 2760 (2019).

the Copyright Office had not yet acted on the registration applications at the time the cases were filed.³¹

So there's a lot to be said for the registration requirement. I'm not saying there aren't costs and you'd better do cost/benefit analysis.

PROF. HANSEN: If you are a copyright attorney in the United States, if the first thing you don't do with your client is file for registration, it's almost malpractice. The date you file will be the effective date of the registration. And of course, that's what you should be doing. You shouldn't be sitting on anything.

So to the extent that this gets more things registered, that means more searchers are going to find things. It just seems like a very good solution with very little downside if lawyers do what they're supposed to do, which is get these things registered.

QUESTION [Steve Tepp, Sentinel Worldwide, Washington D.C.]: There is more downside than you were describing in your remarks. If you are a photographer who makes \$35,000 a year and you produce 50,000 images a year, no matter what a lawyer tells you, you simply do not have the wherewithal to register, even with group registration rules, all your works. So it's not quite that simple.

PROF. HANSEN: I have an answer to that. Photographers are the complete losers in the copyright system because they don't make a lot of money, they have to get their money from resales, and they have these new cameras with which they can do 3000 pictures in two seconds. The answer is you sit down with your client: "One, what are the key things that you have done and let's get those registered. But as soon as the people start messing with your picture — or you think they are or they're going to be doing something — you get that one registered and the effective date will be that. You can say the real infringement didn't start until after the date."

So there are things you can do for photographers. I have represented photographers. First of all, it's a lonely existence and you don't make a lot of money. But there are things you can do that can help. It's not a hopeless situation anyway. But I think you're right.

QUESTION [Massimo Sterpi, Gianni, Origoni, Grippo, Cappelli & Partners, Rome]: Does it make any sense to still speak about copyright registration through the U.S. Copyright Office — it's expensive, bureaucratic, and takes a lot of time — when you have registration services on the blockchain that cost literally nothing; you can upload 50,000 images for a couple of dollars?

MR. CARSON: I'm not an expert on blockchain so I'm not going to speak to that particular issue. But yes, there are other ways you can certainly make your works known. The Copyright Office is certainly looking at ways to interoperate with other databases and with the private sector.

We are moving into a world where technology does offer a lot more options, and it is conceivable that services such as those that you are talking about can serve one of the functions of registration, which is to create a record of ownership.

What it doesn't do — and you've got to go through the cost/benefit analysis on this to figure out how sensible it is, but I think there is something to it — is it doesn't have the Copyright Office, a government agency, that will examine the works and make judgments with respect to, for example, copyrightability. That is an important role, and it is a role that the courts value.

I think the Register of Copyrights would like to say something.

³¹ Some of those cases have been subsequently refiled, but the new complaints thus far have not included any claims of copyright infringement.

QUESTION [Karyn Temple, Register of Copyrights, U.S. Copyright Office, Washington, D.C.]: I felt I had to say a couple of words in support of the registration system. I think that David has actually done a great job articulating the benefits of the registration system.

One of the things that hasn't been considered as well, in terms of the burdens and inefficiency that some have complained of or criticized with respect to the registration system, is that we are in the midst of a full modernization of our system. While now we only have group registration, for example, for 750 photographs at a time, which is still a significant number, as we start to speak about technology using AI and other various methods, we might be able to get to a point where we are able to actually take in 5000 photographs at a time and register them in a very efficient way. So it is not as if this is a system that is not changing to meet the needs of copyright owners around the world. It is something that we are continually looking at.

With respect to photographers specifically, the Copyright Office just came out with a letter to Congress talking about some of the things that we think are important to address the needs of photographers.

With respect to our review of our practices to also address some of the needs of copyright owners today, we have issued in the last two years more than a dozen additional rulemakings to really look closely at our policy and regulatory practices and ways to improve them so that the registration system, which I think has serious benefits, is not outweighed by any of the burdens of inefficiencies that people are concerned about.

I do want to make sure that people understand that we are aware of some of these concerns and are really working hard to overcome them as much as possible.

PROF. HANSEN: Thank you very much, and I want to thank the panel.

I know you're all worn out, but this is a durability test among other things. We'll take a five-minute break and then we're going to continue with the next panel, and then you get a big break right after that. Thank you very much.