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FEDERAL TRADE COMMISSION

COMPETITION AND CONSUMER PROTECTION

IN THE 21ST CENTURY

Tuesday, October 23, 2018
9:00 a.m.

Constitution Center
400 7th Street, S.W.
First Floor Conference Room
Washington, D.C.

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FEDERAL TRADE COMMISSION

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1 P R O C E E D I N G S

2 WELCOME AND INTRODUCTORY REMARKS

3 MS. MUNCK: All right. Well, thank you very
4 much for joining us this morning. My name is Suzanne
5 Munck, and I am the Federal Trade Commission's Chief
6 Counsel for Intellectual Property. I am also the
7 Deputy Director of its Office of Policy Planning. And
8 together with my colleagues, we are very grateful that
9 you have joined us today.

10 I would like to express special gratitude to
11 our panelists who have traveled from all over the
12 United States to join us. And I am looking forward to
13 a very productive session.

14 Tomorrow, we will be joined by United States
15 Patent and Trademark Office Commissioner for Patents
16 Drew Hirshfeld and the Acting Chief PTAB Judge, Scott
17 Boalick. I want to highlight that point because I
18 believe that the PTO and the FTC have worked together
19 in every hearing that we have held to look at issues
20 at the intersection of antitrust and intellectual
21 property. I think that is very important because one
22 of the themes that you will hear, particularly from
23 this morning's panel, is that innovation is complex.
24 It requires a number of steps from idea to development
25 to commercialization.

1 Intellectual property policy also is
2 complex. It does not happen through the work of only
3 the FTC or only other agencies. We all come together
4 to make sure that we are looking for policies that do
5 the best job of promoting innovation and protecting
6 U.S. consumers.

7 Tomorrow afternoon, we will close with
8 remarks from Commissioner Rebecca Kelly Slaughter. I
9 think that is particularly interesting because
10 Commissioner Slaughter played a role in the
11 development of the America Invents Act.

12 So, why is the FTC examining innovation and
13 intellectual property policy? Well, as we have said
14 for a number of years, innovation benefits consumers
15 through the development of new products, processes,
16 and services that improve lives and address unmet
17 needs. Innovation rights are vital to the U.S.
18 economy. In 2016, the U.S. Government reported that
19 IP-intensive industries support at least 45 million
20 U.S. jobs and contribute more than \$6 trillion to or
21 slightly more than 38 percent of U.S. gross domestic
22 product.

23 For more than 20 years, the FTC has used its
24 policy and enforcement tools to engage with issues at
25 the intersection of antitrust and intellectual

1 property. We have convened hearings such as this to
2 look at the role of patent quality, to look at the
3 role of antitrust in promoting innovation. We have
4 looked at the IP marketplace and remedies issues.
5 And we have looked at more specific issues such as
6 patent assertion entities and other IP concerns.

7 Through that work, we have issued reports,
8 drafted amicus briefs, contributed to policy
9 discussions among interagency groups, and I want to
10 highlight that point, because you might think, how is
11 what I am doing here today, sitting here today, going
12 to contribute to the overall policy dialogue? And I
13 think that, if you go back and you look at the FTC's
14 reports, you can see a direct link from what panelists
15 say on the dais to the FTC's summary of those panel
16 positions, to recommendations, to supporting our
17 colleagues in the Solicitor General's Office when it
18 comes to addressing those issues before the Supreme
19 Court. So there is a real trend from what we are
20 doing here today to overall policy.

21 Now, we should not sit on our laurels. When
22 Chairman Simons convened these overall hearings, he
23 noted that a fundamental characteristic of a strong
24 institution is a willingness to engage with new ideas
25 and, in our case, changes in markets and

1 business-to-business and business-to-consumer
2 relationships. This decade has brought several
3 changes to intellectual property laws in the
4 United States. So it is an opportune time to explore
5 the role of intellectual property in promoting
6 innovation.

7 For example, the America Invents Act was
8 signed into law in 2011. The AIA is the most
9 significant legislative change to the patent system
10 since the Patent Act of 1952. It moved the United
11 States from a first-to-invent system to a
12 first-to-file system. It established new procedures
13 to challenge issued patents and it authorized the
14 USPTO director to set its own fees.

15 Within the last ten years, we have also seen
16 several significant cases from the Supreme Court.
17 These decisions have affected a wide range of issues
18 from patent eligibility to fee shifting, from claim
19 construction to venue and myriad other issues.

20 On the copyright side, parties continue to
21 examine the application of the Digital Millennium
22 Copyright Act, licensing issues, and the fair use
23 doctrine. Content models are shifting from
24 downloading to streaming.

25 With Chairman Simons' objective in mind, we

1 have gathered expert panels of academics, economists,
2 and industry members to explore key questions at the
3 intersection of innovation and intellectual property.
4 This morning, we will hear from a panel of expert
5 academics who will talk about the role of government
6 in promoting innovation and the various ways that
7 patents are used in different industries. I think you
8 will hear that there is not a homogeneous approach.

9 Our second panel this morning will turn to
10 business considerations. I am thrilled that we have
11 been able to assemble a group of practitioners to talk
12 about the role of innovation in business decisions,
13 particularly in early stage investment and venture
14 capital issues.

15 Then, this afternoon, we will move to the
16 FTC's first copyright panel. We have noticed over
17 time a shift to copyright issues, and it is time for
18 us to stop and ask, what is the relationship between
19 competition issues and copyright issues? So we will
20 be surveying an expert panel this afternoon.

21 Tomorrow, as I mentioned, we will begin with
22 a keynote from Commissioner Hirshfeld. Then we will
23 move into an exploration of emerging issues in patent
24 quality and patent litigation. We will have a panel
25 of trade associations who will talk to us about how

1 these changes have affected their members. One reason
2 why we decided to collect trade associations in that
3 panel is that we wanted to make sure that we were
4 reaching the broadest sector of markets.

5 Finally, we will close with a panel of
6 economists exploring the literature in this space and
7 policy changes of which the FTC should be aware.
8 Finally, we will close with keynote remarks from
9 Commissioner Slaughter.

10 As you listen today, please think about
11 questions that you have. We will have people walking
12 through the audience to take your questions. They can
13 come up to us. We also are trying to be very open in
14 collecting public comments in this space. A number of
15 you have submitted public comments already. I have
16 read each of them and thought of them as we began to
17 develop today's program. The public comment period
18 for this hearing will close on December 21st.

19 Now, before I begin the substantive program,
20 I would like to cover a few administrative matters.
21 If an emergency occurs, please follow the instructions
22 over the building's PA system. If we need to evacuate
23 the building, please leave in an orderly manner
24 through the 7th Street exit. After leaving the
25 building, please turn left and proceed down 7th Street

1 across E Street to the FTC emergency assembly area.
2 Please remain there until instructed to return to the
3 building.

4 If you have received an FTC's visitor's
5 badge, we reuse those. Please turn that into the
6 staff when you leave the building. And if you notice
7 any suspicious activity, please alert building
8 security.

9 For lunch, there is a cafeteria in the
10 building at the other end of this floor. It will
11 close at 3:00 p.m. Restrooms are located just around
12 the hall.

13 And please be advised that this event is
14 photographed and webcast, and recorded with huge
15 thanks to our amazing tech team. By participating in
16 this event, you are agreeing that your image and
17 anything you say or submit may be posted indefinitely
18 at FTC.gov or one of the FTC's social media sites.
19 The webcast recording as well as a transcript of these
20 proceedings will be available on the FTC's webpage
21 shortly after this event.

22 If you have any other questions, please feel
23 free to reach out to me or any of my FTC colleagues.
24 We are here to help and very, very grateful that you
25 have joined us either in person or via webcast.

1 AN OVERVIEW OF INNOVATION AND IP POLICY

2 So with that, I will take my seat and
3 introduce the panel. I am so excited for today, so
4 excited for this discussion. And I am just thrilled
5 that you are all here. Thank you very much.

6 So now, I am moving over here. This
7 morning, we are joined, as I mentioned, by several
8 exceptional academics in the space of innovation. To
9 my left is Professor Tom Cotter of the University of
10 Minnesota Law School. Professor Cotter has recently
11 completed a book that explores the role of
12 intellectual property in different market sectors.

13 Next, we have Professor Rai. Professor Rai
14 is at the Duke University School of Law. If you look
15 at her bio, she has tremendous experience both in
16 government and in academia, and so I think is well
17 positioned to think about the policy objectives of
18 government and the tools that we can use to achieve
19 those.

20 Next, we have Professor Pian Shu from the
21 Georgia Institute of Technology, Scheller College of
22 Business. She will present information today on
23 innovation, trade, and the role of China in this
24 dialogue.

25 Finally, we have Professor Bill Kovacic,

1 former Chairman of the Federal Trade Commission. I
2 was talking to Bill this morning and remarking on how
3 he has been a stalwart in the FTC hearings. And he
4 has a particular ability, I think, to take a critical
5 eye to the FTC, but also make recommendations that
6 will help us best use our tools to promote innovation
7 and to protect consumers.

8 So with that, I would like to turn it over
9 to our panelists who will each give a ten-minute
10 presentation, and then we will have a question-and-
11 answer period. Thank you.

12 MR. COTTER: Well, thank you very much,
13 Suzanne, for inviting me to participate in this panel
14 today. I would like to spend my ten minutes talking a
15 little bit about the role of patents and promoting
16 innovation and briefly summarizing the standard
17 economic theory of patents as an incentive to invent
18 and then talk about some of the empirical evidence as
19 summarized in my recent book. And then I will close
20 with a few observations about the need to balance the
21 benefits and the costs of patent protection.

22 So the standard theory is that the cost of
23 developing a new invention in terms of time, money,
24 resources, uncertainty, often is very high, whereas
25 the cost of copying often is comparatively low. And

1 when these conditions hold, then from a purely
2 self-interested perspective, it would be more rational
3 to copy than to invent. But if everybody follows that
4 strategy and becomes a free rider, then nothing is
5 invented.

6 Now, of course, those conditions will not
7 always hold. Sometimes the cost of copying is very
8 high. Sometimes the cost of inventing is not very
9 high, in which case first mover advantage's lead time
10 may provide a sufficient incentive to invent.
11 Nevertheless, the conventional wisdom shared by most
12 economists is that, absent patents or some other
13 corrective, there would be an under-supply of new
14 inventions. And given the importance of innovation to
15 economic growth and human well-being, this surely
16 would be a bad outcome.

17 So in theory, patents solve the free-riding
18 problem by conferring a right to exclude or demand
19 payment for a period of time, thus providing an
20 opportunity for inventors to recoup the sunk cost of
21 inventions. So that is the theory. And what does the
22 empirical evidence consist of and what does it show?

23 First of all, over the years, economists
24 have conducted surveys of firms to get a sense of how
25 important, if at all, the patent incentive is to their

1 willingness to engage in research and development, and
2 the surveys generally show two things. The first is
3 that overall in terms of the role they play in helping
4 firms to recoup their R&D, patents typically rank
5 lower in priority than do alternatives such as trade
6 secrecy and lead time. Now, that does not mean that
7 patents are unimportant or never important, though the
8 surveys do indicate that patents tend to be more
9 important in industries such as pharmaceuticals,
10 biotech, medical instruments, and specialty chemicals
11 than in others.

12 Secondly, there have been several studies
13 that have tried to estimate what it does cost in terms
14 of R&D to bring a new drug to market, and the best
15 known studies in this regard are the ones that have
16 been conducted over the years by Joseph DiMasi and his
17 colleagues at Tufts University using data provided by
18 the drug companies. Their most recent 2016 paper
19 estimates the average R&D costs incurred by
20 multinational drug companies of bringing 87
21 self-originated new chemical entities, NCEs, and 19
22 new biologic entities, NBEs, to market at \$2.6
23 billion.

24 Now, studies are sometimes critiqued for
25 various reasons. Other researchers do not have access

1 to the underlying data, for example. Another possible
2 criticism is that the study focuses on self-originated
3 NCEs and NBEs, which may not be representative of the
4 cost of drugs generally. Also, many drugs approved by
5 the FDA are not NCEs or NBEs, but rather are new
6 indications for existing drugs.

7 But, nevertheless, most of the other studies
8 that have tried to estimate the R&D costs of bringing
9 a new drug to market using publicly available data
10 have concluded that the average cost is at least
11 several hundred million dollars. So whatever the
12 correct number is, it is a large number. And, with
13 large up-front R&D costs, comparatively low costs
14 usually of making a generic copy, most economists
15 would agree that if any industry needs patent
16 protection, it is the drug industry.

17 By contrast, for most other industries, the
18 relevant R&D costs are probably considerably lower.
19 But more empirical studies, both with regard to drugs
20 and with regard to other industries, would be welcome.

21 A second point I want to make is that there
22 are some other possible social benefits of patents so
23 that even if patents do not materially impact the
24 incentive to invent in certain fields, it is possible
25 that they are still serving a useful public purpose.

1 Most prominently, there is the disclosure benefit
2 because patents are public records. They help in
3 disseminating new technical information, although,
4 again, the empirical evidence is somewhat mixed
5 regarding how important this benefit is in practice.

6 Disclosure also means that it is easier to
7 license a patent than a trade secret. And for this
8 reason, among others, patents may assist in the
9 commercialization of new inventions.

10 There is also a growing body of evidence,
11 again cited in my book, that patents play a positive
12 role in helping startups to attract venture capital.
13 And in this regard, patents may serve as signals of
14 the underlying value of a new company, which, by its
15 very nature, does not have a track record and is not
16 yet publicly traded. Again, however, more research on
17 the extent to which patents effectively serve these
18 other purposes of disclosure, commercialization
19 signaling, either in general or for specific
20 industries, would be welcome.

21 Then I want to close with two caveats. The
22 first is that depending on the circumstances, patents
23 may not always be the best or the only way of inducing
24 new inventions. It is important to at least consider
25 the alternatives such as grants, prizes, tax benefits

1 for R&D, advanced market commitments, FDA
2 exclusivities of various types. In my view, there is
3 a role for all of these alternatives, although I also
4 do not think that any of them are going to supplant
5 the patent system anytime soon.

6 One problem is informational. Neither the
7 Government nor any other central planner knows
8 precisely what needs to be invented or how much of a
9 reward to offer for its completion. The patent
10 system, by contrast, has the advantage of being
11 decentralized. Inventors go off and invent, and then
12 the market, the wisdom of crowds, if you will, decides
13 what, if anything, their contributions are worth.
14 That said, however, the patent system is not perfect
15 either.

16 It is not designed, for example, to provide
17 incentives for the basic research that has no
18 immediate or obvious potential payoff. So we probably
19 need grants and other tools for that. And the patent
20 system may not do a very good job of inducing
21 inventions for which market demand is low, but human
22 need is very high. For example, drugs to treat
23 diseases that are endemic to developing countries for
24 which AMCs or other tools may be better suited.

25 Yet another policy alternative are other

1 bodies of IP law. Software, for example, can be
2 protected by copyright, and while the scope of
3 copyright protection is less than the scope of patent
4 protection, maybe that is all that is really necessary
5 to induce the necessary R&D in this field.
6 Alternatively, trade secret protection might be
7 sufficient to induce the creation of inventions that
8 are difficult to reverse engineer. Although, from the
9 public's standpoint, trade secrecy may not be optimal
10 because we forgo the disclosure that comes with having
11 a patent.

12 And so for this reason, I do worry a bit
13 that Mayo vs. Prometheus and other cases broadly
14 constructing the law of nature exclusion to
15 patentability may either inhibit R&D into new
16 diagnostic methods, personalized medicine, or may
17 cause inventors to opt for trade secrecy. And, again,
18 I think more research into the impact or not of the
19 patent incentive as it relates to diagnostic methods
20 would be very useful.

21 My second caveat is that we need to remember
22 that while patents may confer many social benefits,
23 inevitably there are social costs as well,
24 administrative costs, sometimes monopoly costs,
25 transaction costs. And to some degree these costs are

1 inevitable if we are going to have a patent system,
2 and as some of the other panelists may be discussing,
3 there is a healthy debate whether a competitive or
4 somewhat less competitive market structure is, in
5 general, better for fostering innovation. But patent
6 doctrine and other regulatory efforts should be
7 structured to reduce or eliminate these costs whenever
8 they are unnecessary to fulfilling the public purpose
9 of patents.

10 So as I have observed before, if patent
11 rights are too weak, we risk not inducing enough new
12 invention disclosure signaling, and so on. But at the
13 same time, if patent rights are too strong in terms of
14 duration, scope, granting too many low-quality or
15 trivial patents, at some point, the social costs
16 threaten to outweigh the social benefits. So the
17 ideal patent system would be structured so as to
18 maximize the surplus of social benefits over social
19 costs.

20 Of course, nobody really knows how to do
21 that. Efforts to quantify all of the relevant costs
22 and benefits defies empirical analysis. Nevertheless,
23 using the best tools we have available of theoretical
24 and empirical economics, I believe that policymakers
25 often can be reasonably confident in predicting

1 whether a given change from the status quo is more
2 likely to lead us towards or away from this
3 hypothetical sweet spot that best serves its intended
4 beneficiaries, namely all of us.

5 MS. MUNCK: Thank you very much, Professor
6 Cotter.

7 Professor Rai?

8 MS. RAI: Thank you so much, Suzanne, for
9 inviting me to these hearings. Professor Cotter has
10 done a very nice job of walking us through the role
11 that patents and other types of intellectual property
12 play in different industries and for different types
13 of firms. And he has also touched on the reality that
14 there are other tools that the Government has at its
15 disposal for promoting innovation.

16 I am going to dig a little bit deeper into
17 some of these other tools and some of the data on
18 innovation, particularly research spending that my
19 colleagues and I at Duke have collected over the last
20 few years. This data has interesting implications for
21 innovation generally and also for thinking about
22 patents and intellectual property as policy tools as
23 well.

24 So as with patents and other types of
25 intellectual property, the other policy tools the

1 Government has at its disposal do play different roles
2 in different industries as well. So the project that
3 my colleagues and I conducted ran from 2016 to 2018.
4 It was funded by the Kauffman Foundation, and it
5 assembled literature on changes in the U.S. innovation
6 system as a whole and the extent to which, if any,
7 these changes represented a policy concern. We
8 concluded with a report from our former Executive
9 Director Steven Merrill that suggested that, indeed,
10 there was a policy concern and enunciated some policy
11 recommendations.

12 So first, has there been a change in the
13 innovation ecosystem? The tentative answer was yes,
14 we concluded. We drew this answer basically from
15 National Science Foundation data gathered through
16 their annual BRDIS survey, as well as some related
17 analysis by Duke colleagues, Ashish Arora and Sharon
18 Belenzon. These data indicate that the private sector
19 has shifted over the last 30 or so years from spending
20 on research towards spending on development. The
21 shift has been happening basically since the 1990s.

22 This trend could be seen as worrisome.
23 Alternatively, it could be argued that perhaps
24 research has simply become more efficient. We think,
25 on balance, there is some reason to be concerned that

1 the private sector has shifted out of research to a
2 significant extent, particularly outside the biotech
3 and pharma industries. Biotech and pharma are
4 exceptions in this arena as well as they are, it
5 seems, in the use of patents.

6 By contrast, industries like the computer,
7 electrical and semiconductor industries have seen much
8 greater declines in their expenditure on research. So
9 what are some potential causes? Here, we are
10 reluctant to say too much. But one point is worth
11 mentioning, I believe, and that is, since this decline
12 in research has been happening since the 1990s, during
13 a period of time when patent law has shifted
14 significantly from being extremely generous towards
15 patents towards perhaps being less generous in the
16 last, say, ten years, at least as a first order
17 matter, patents cannot be the major explanation for
18 why there has been a decline in research outside of
19 biotech and pharma.

20 In addition, it is, of course, worth noting,
21 as Professor Cotter has noted, that patents and other
22 IP, particularly patents, tend to be a double-edged
23 sword when it comes to innovation. They promote
24 innovation, but they can, in certain cases, also
25 create transaction costs for innovation.

1 So we conclude on balance that patents are
2 probably not the major player here and we are -- have
3 reasons to be concerned about other factors. Some of
4 these factors will be discussed, I believe, by
5 Professor Shu as she speaks on the role of China and
6 trade, but I did want to note another potential factor
7 that has been highlighted by my colleague at Duke,
8 Alon Brav, who has noted that although hedge fund
9 activism can increase the efficiency of R&D
10 investment, it probably does reduce R&D expenditure on
11 balance by firms. And so that is a potential area of
12 causation as well.

13 Finally, I want to conclude with what the
14 toolkit could be in terms of interventions. So in the
15 paper authored by our Former Executive Director Steven
16 Merrill, we speak a lot about the role the federal
17 funding can play. Professor Cotter has talked about
18 that to some extent. But I want to highlight one
19 particular piece of that white paper, which I think
20 gives away what we think is a key problem with
21 research funding. And the title of the paper is,
22 Righting the research imbalance.

23 What is the research imbalance? Well, the
24 research funding for the life sciences has been quite
25 robust over the last 30 or 40 years. In fact, it now

1 represents a significant majority of the federal
2 science budget. By contrast, the physical sciences
3 and engineering research budget has fallen from 41
4 percent of the federal science budget in 1980 to 28
5 percent today. Life sciences has picked up all the
6 difference. So we think that that is a policy lever
7 that can and should be used.

8 Fortunately, it appears, at least in the
9 last few months, Congress has heeded some of those
10 warnings, not simply from us, but from many others
11 about trying to write this research imbalance and that
12 is good. But we hope that that will continue to be
13 the case even as this current budget cycle -- we move
14 on from this current budget cycle.

15 I will conclude with a couple of notes about
16 IP, which happens to be, of course, the area in which
17 I study most intensively. I, too, share concerns
18 already enunciated by Professor Cotter about the role
19 of the patent eligibility decision and subject matter
20 eligibility decisions handed down by the Supreme
21 Court, particularly in the area of medical
22 diagnostics. And I have done some research -- some
23 empirical work in that area that I am happy to talk
24 about in the question-and-answer session as
25 appropriate.

1 The issue, of course, if one is to address
2 the 101 question is how to fix it. And it is a
3 challenge to come up with good language, and I think
4 everyone who has considered the question thoughtfully
5 would recognize that the challenge of statutory
6 language change is a significant one. So perhaps
7 judicial evolution is the way to go, and we will see
8 if judicial evolution brings us to a stage that is
9 better equilibrium.

10 And then, finally, I want to note one piece
11 that brings together in both sets of my comments or
12 one point that brings together both sets of my
13 comments, and that is the relationship between
14 intellectual property and public funding. As many of
15 you probably know, the fruits of public funding can,
16 for the most part, be patented now by a consequence of
17 Bayh-Dole. Bayh-Dole, on balance, has been a very
18 good thing. However, it would be very good -- and
19 this goes beyond the typical academic plea for more
20 data. It would be good if we could have access to
21 information on exactly how universities and other
22 recipients of federal funding commercialize
23 innovation, because to the extent that our academic
24 center, industrial complex is a unique feature of the
25 U.S. innovation ecosystem, and I think it is, it would

1 be good to have more information that we could -- and
2 data that we could analyze on that question.

3 So I really appreciate this opportunity to
4 speak, and I look forward to the question-and-answer.

5 MS. MUNCK: Thank you very much.

6 And, Professor Shu, I know that you have
7 slides. I do not know if you would like to take them
8 there or here. I have a --

9 MS. SHU: Yeah, I can take from here. Thank
10 you. And do I just press it?

11 MS. MUNCK: Yes.

12 MS. SHU: Okay, great. Okay, all right.
13 Thank you so much for having me here and for putting
14 together this excellent panel. So I want to actually
15 talk about some recent empirical findings looking at
16 the impact of competition on innovation using actually
17 patents as a measure of innovation. So this sort of
18 kind of shifts gears a little bit where we are not --
19 I am not going to be talking about IP policy, per se, but
20 actually looking at research using patents as a
21 measure.

22 So in this sense, like me and my innovation
23 colleagues are sort of consumers of the IP system, we
24 use patents as measures. So this is based on two
25 works with coauthors. One is an empirical study and

1 another is a literature review. So the key question
2 here is we are interested in understanding how import
3 competition from China affects the innovation in the
4 U.S., and this is particularly of interest because
5 Chinese imports represents a major source of increase
6 in competition in the U.S., especially in the
7 manufacturing sectors. So as you can see on this
8 graph, imports from China over the last several
9 decades grew from really, you know, nothing, to nearly
10 3 percent of the U.S. GDP. The exports to China also
11 grew as part of the increased trade, but not nearly as
12 much as imports.

13 And there are several interesting sort of
14 characteristics of this rising import competition.
15 One that, I think, the timing of this increase in
16 Chinese imports is sort of unexpected because China
17 actually experienced a lot political and economic
18 uncertainty in the late '80s and early '90s. So even
19 in -- I believe in '89 or '90, the Wall Street Journal
20 published their outlook for the next century, and they
21 actually ranked China as one of their least-expected
22 countries to grow.

23 So that shows you that, at that time, when
24 China started opening up and shifting towards market
25 economy, that was not necessarily an event that many

1 people expected. So that unexpected timing actually
2 represents a really good opportunity for empirical
3 economists to study sort of the impact of this rise,
4 precisely because it was unexpected.

5 And the second characteristic is that sort
6 of the increase in this competition is also
7 unprecedented because prior to China shifting towards
8 a more market-oriented economy, China was actually
9 quite far from the production frontier due to the more
10 -- sort of the state-owned enterprises and how the
11 economy was structured. So after they opened up,
12 there is a huge shift towards a production frontier,
13 which drove this really intense increase in the rise
14 of imports. And, finally, China has a clear
15 competitive advantage in cheap labor, which also
16 drives the nature of their production and their
17 output.

18 So the rise of Chinese import competition to
19 empirical economists like me is really interesting
20 because it presents a really unique empirical
21 opportunity to study the impact of competition
22 innovation, which actually is one of the longest
23 debated questions in economics. So going back to
24 Joseph Schumpeter in '43, he is the first one to point
25 out that competition actually can have a negative

1 impact on innovation because it reduces the incentives
2 of companies to come up with innovation.

3 So assume like a monopoly that have full
4 access to the market, obviously, the returns to
5 innovation is quite high, because they have access to
6 the full market. In contrast, when you have a lot of
7 competition, you have access not necessarily to the
8 full market. That reduces the incentives to innovate.
9 So that is what I mean by the Schumpeterian effect on
10 the slide.

11 On the other hand, the opposite argument
12 that competition can actually be a way to escape --
13 sorry. Innovation can actually be a way to escape
14 competition and take market shares from the
15 competitors. So if you do not have competition as a
16 monopoly, you actually do not have any sort of like
17 profits to replace, so the opposite argument that
18 competition can encourage innovation through this
19 channel of escape competition. So these two, one is a
20 negative argument. One is a positive argument. These
21 two are the major arguments on the impact of
22 competition innovation.

23 And, finally, there is a third channel which
24 is less examined empirically, but I think it is
25 important to talk about theoretically, that oftentimes

1 there are managerial slacks in a firm where managers
2 are not necessarily maximizing profits but act
3 according to their own interests. And competition can
4 actually reduce this managerial slack by increasing
5 the threat of, for instance, bankruptcy. So in this
6 case, competition can increase innovation.

7 So ultimately, this is an empirical problem
8 where we -- in my study, we look at the impact of
9 Chinese import competition. And I do want to point
10 out that, although Chinese imports can generate
11 competition for firms in the same industry, it is not
12 the only way that it can affect firm innovation,
13 because for firms in downstream industries, Chinese
14 imports can actually provide access to important
15 intermediate inputs. So what I am presenting is
16 actually only one aspect of how Chinese imports can
17 affect firm innovation.

18 So with our data that we collected, USPTO
19 patent data, matched to the firm-level data for public
20 firms and as well as industry-level data on trade
21 exposure. So our analysis really focuses on
22 understanding how changes in Chinese import
23 penetration between '91 and 2007 affect changes in
24 firm patenting and other outcomes. It turns out that
25 this is actually not an easy analysis, because we have

1 to control for sort of -- think about how U.S. firms
2 demand and U.S. technological trends, how that could
3 affect patenting.

4 So what we really wanted to do was isolate
5 the exogenous variation in the Chinese import
6 penetration and link that to changing firm outcomes.
7 And we do that by looking at -- I will obviously skip
8 the details here, but we look at this using Chinese
9 imports to other countries, as well as policy changes
10 in the U.S. to really identify this exogenous
11 innovation.

12 So to summarize our key findings, we
13 actually find -- first of all, we find that Chinese
14 import competition had a negative impact on firms'
15 financial outcomes in terms of, for instance, sales,
16 profitability and employment. So this shows that
17 Chinese import actually did increase the competitive
18 pressure that the U.S. firms faced. And also as a
19 result of this increased competitive pressure, we find
20 that the import competition had a negative impact on
21 patenting, which we used as a measure of the
22 innovation output, as well as R&D expenditure, which
23 is input into innovation.

24 So taking these together, the results
25 suggest that competition led to a contraction of U.S.

1 firms in both production and innovation. So firms in
2 industries that faced more competition contracted more
3 or grew less than firms faced with less competition.
4 So sort of the first, you know, reaction to this
5 finding might be, you know, a sense of concern that
6 this potentially represents a slowdown in the
7 innovation and the growth in the U.S. And I want to
8 just shout out to Paul Romer, who just won the Nobel
9 Prize, for pointing out that innovation is the engine
10 of U.S. growth. So in this slide, this is sort of a
11 pessimistic reaction to these findings.

12 However, I do want to point out that there
13 is a more optimistic reaction to these findings,
14 because Joseph Schumpeter, the person who came up
15 with the argument that competition is bad, reduces
16 incentives to innovate, is also the same person
17 who talked about -- who introduced the idea of
18 creative distraction. So this idea of new entrants
19 replacing old incumbents and new markets replacing old
20 markets is a natural part of how the market grows and
21 evolves.

22 So these are the two sides. And I think one
23 aspect to consider in this is how much of this
24 reduction in patenting and R&D expenditure represents
25 an overall decline in innovation capability versus how

1 much of it is through reallocation from, for instance,
2 the manufacturing sector to service sector? So that
3 is an open question.

4 And, finally, I just want to quickly put
5 these results in context, because any empirical
6 results, if you want to think about interpretation, it
7 is really important to think of some of these
8 characteristics. So how competition affects
9 innovation depends both on the nature of the
10 competition, as well as the nature of the whole
11 market.

12 So in the case of Chinese import
13 competition, I think two characteristics are really
14 important. One is that, as I mentioned, it is an
15 unprecedented increase in the intensity of competition
16 that could be unrivaled if you just look at changes in
17 domestic competition. And the second is that this
18 competition also concentrated on the low cost, lower
19 end of the market. So the nature of the whole market
20 also matters because other studies have found Chinese
21 import competition to have actually positive impact
22 for innovation in Europe and the developing countries,
23 and if there is interest in Q&A I can explain how to
24 reconcile these different findings.

25 And, finally, I do want to quickly mention

1 that access to important intermediates, so the supply
2 chain effect, is actually -- there is overwhelming
3 evidence not using the international market -- not
4 necessarily U.S. firms, there is overwhelming evidence
5 that this access to imported inputs has positive
6 effects on firm innovation. So any policies that
7 think about changing import competition, per se, must
8 take into consideration its overall impacts, supply
9 chain and competition and other aspects of firm
10 activities. Thank you.

11 MS. MUNCK: All right, thank you very much,
12 Professor Shu.

13 Finally, Professor Kovacic?

14 MR. KOVACIC: Thank you, Suzanne and John
15 and Bilal, for the opportunity to participate in the
16 discussion today. It is good to be back home.

17 I would like to talk about the role of the
18 Federal Trade Commission as a means for policy
19 development involving innovation and intellectual
20 property. If we go back a century, you see that the
21 FTC took shape in a period of revolutionary
22 developments in technology and in the application of
23 intellectual property.

24 In this period, in the area of
25 transportation, that was the development of the

1 automobile, oil-fueled steamships and the airplane; in
2 communications, the extraordinary rollout of the
3 telephone as a means of communication; the development
4 of the radio and what was then called the wireless,
5 not the current wireless, but what was known then as
6 the wireless; and in the area of entertainment, the
7 emergence of a new device called the moving picture
8 and soon to be the talking picture.

9 To citizens of the time, these change were
10 no less revolutionary than the developments we see
11 today. And to the Congress, a key question is how,
12 for purposes of competition law, how does one respond
13 to this, how does one understand them? And in crucial
14 respects, the FTC was a core of the policy response, a
15 response that encompassed a variety of policymaking
16 tools.

17 One was law enforcement, but a special type
18 of law enforcement, law enforcement that would take
19 place through a mechanism of administrative
20 adjudication with a deliberately elastic substantive
21 mandate, Section 5 of the Federal Trade Commission Act
22 and its prohibition on unfair methods of competition.
23 The agency would be governed by a board, not by a
24 single executive, a board that would draw upon diverse
25 backgrounds and expertise to address these types of

1 issues.

2 The agency would not simply be an antitrust
3 enforcement body in the special sense that I have
4 described. Far more important, the Commission
5 embodied a concept that we described today as
6 competition policy, not simply antitrust enforcement.
7 It would have a deliberately broad research and data
8 collection function embodied in Section 6 of the
9 Federal Trade Commission Act to collect information by
10 use of compulsory process, to issue reports without
11 contemplating necessarily the prosecution of cases.

12 And it would have a special role to play as
13 a convener to hold events like this one, to hold a
14 series of proceedings that would provide a basis for
15 learning, discussion, debate, and the development of a
16 synthesis with respect to specific issues.

17 And in many respects, I think through its
18 history, the agency has achieved the fullest
19 expression of this vision in dealing with issues such
20 as innovation and intellectual property before the
21 past 20 years that Suzanne referred to, extraordinary
22 work involving the pharmaceutical sectors; a report on
23 tetracycline; litigation involving the use and misuse
24 of the tetracycline patents; the exploration of patent
25 thickets in cases such as the Xerox monopolization

1 case; and in merger review, simply to single out
2 defense and aerospace in the course of looking at
3 dozens of mergers. The Commission's decisions have
4 dealt fundamentally with the way in which innovation
5 takes place in these crucial areas.

6 A further step forward, though, I think
7 takes place in exactly the way that Suzanne described
8 before. The proceedings that began in 2001 and
9 culminate in the production of the "To Promote
10 Innovation" report in 2003 is a broader realization of
11 the capacity of the agency to serve as a convener to
12 elicit views from a variety of different perspectives
13 and then to distill that learning into a report that
14 can be a source of guidance for policymakers, for
15 judges, for legislators. Those undertakings took over
16 20 days of hearings that took place in different
17 venues across the country.

18 They began not in Washington, but in
19 California on the campus of the University of
20 California at Berkeley where Kenneth Arrow and other
21 luminaries in the field came together to discuss the
22 fundamental issue that Tom already and Pian were just
23 referring to, that is what role does competition, on
24 the one hand, and the protection of exclusive rights,
25 on the other hand, what roles do they play in the

1 development of an innovative and dynamic economy.

2 The result of this was a formative report
3 that dealt with the impact of the rights-granting
4 process on the system, a report that became a focal
5 point for discussion and debate in the United States
6 and has had a dramatic impact on the way in which
7 foreign jurisdictions and international institutions
8 conceive of these issues. It has become a focal point
9 for judicial development of doctrine, notably the
10 Supreme Court in several cases referring to its work.

11 What stood out about this is that this was
12 not litigation. This was a conscious strategic
13 decision by the agency to devote high-quality
14 resources to the development of this convening role
15 and function and to publish reports in the
16 expectation, somewhat of an act of faith, that if done
17 well, they would have a major contribution to these
18 other areas of policymaking. And they required a
19 major investment. This was a significant use of time,
20 both the predecessor bodies of Suzanne's group and
21 others brought together some of the best resources in
22 the agency far and away above a university quality
23 research faculty to do this kind of work with an
24 impact that stands up.

25 There was the further strategy to follow up

1 with this, to continue it, continuing reports and
2 research on patent remedies and on nonpracticing
3 entities, all of it involving a continuing
4 conversation and engagement with the disciplines of
5 competition law and economics, intellectual property
6 law and economics, and the affected business
7 community.

8 If we look at the foundations for this kind
9 of work and we think about what it takes looking
10 ahead, it requires the agency to think about the best
11 use of its capabilities to formulate priorities in a
12 conscious way and the priority here was innovation and
13 intellectual property and to wisely select projects
14 that can realize the application of these special
15 skills. And it also required the continued investment
16 in building the human capital and accumulating it to
17 do the work well.

18 This work cannot be done on the cheap. It
19 takes resources away from what might be the next case.
20 It is not case-specific. It is deliberately devoted
21 to preparing a good research product that can have a
22 major impact and marshaling resources to that end.

23 To look ahead, what do I think of the
24 implications of this for the FTC's role in the future?
25 As you might gather, I am an enthusiastic supporter of

1 this realization of the agency's role and its
2 contribution to policymaking. First, investment.
3 There is plainly, I think, based on past experience, a
4 basis for seeing that this kind of work deserves
5 continued substantial investment by the agency, even
6 though, in a narrow sense, it does not generate the
7 cases that tend to end up on the front page of the
8 newspaper or front page of the business section of the
9 daily publication.

10 Thus, it requires literally what would be
11 the equivalent of research and development in the
12 private sector. This is policy research and
13 development. There has been a very healthy norm that
14 supports its pursuit and development and that becomes
15 important once again here.

16 Among the focal points could be an expanded
17 effort to see how intervention by way of litigation in
18 the past has affected innovation. The way in which
19 merger remedies -- remedies in other cases have
20 affected outcomes with respect to innovation with an
21 eye toward the FTC becoming a uniquely significant
22 repository for information and knowledge about
23 competition information policy remedies, and to be a
24 global resource with respect to that crucial
25 development of policymaking.

1 A second frontier for policy development is
2 what might be called policy integration. The agency
3 was conceived first and foremost as a competition
4 agency. But its role migrates as it expands over time
5 to encompass, by statute in the 1930s, consumer
6 protection. And that consumer protection function has
7 spawned what arguably is a third distinct product line
8 of policymaking and that is data protection and
9 policy.

10 A question to be asked in the future is, how
11 can we draw upon this three-fold combination of
12 capabilities to pursue and develop policy in this
13 area? In short, how do you use the special capacity
14 inherent in our charter?

15 And the last is policy implementation,
16 indeed, through the unique capabilities to act as a
17 litigating body. To my eye, Section 5 of the FTC Act,
18 administrative litigation, are the best home for
19 policy development should litigation be seen as the
20 right way to look at issues, such as standard
21 essential patents, FRAND obligations and their
22 implications. That is, the FTC has a unique
23 capability to operate without the specific constraints
24 of doctrine that come from the interpretations by the
25 courts in Sherman Act and Clayton Act litigation to do

1 special things in this area, all premised on the
2 research and development that come from the
3 nonlitigation roles. Thank you.

4 MS. MUNCK: Thank you very much. And thank
5 you, everyone, for your very thoughtful presentations
6 today.

7 My colleague, John Dubiansky, and I have
8 prepared some questions, but I also want to open it up
9 to each of you to ask questions of each other as we
10 sort of go. So I will kick it off. We have talked a
11 lot about innovation as an engine for economic growth,
12 and I think we have also heard from our panelists that
13 innovation is not homogenous. It depends on which
14 sector you are in, it depends on which stage of
15 investment you are in.

16 So I would like to ask each of you, as the
17 FTC considers its role here, what are the key factors
18 to consider when evaluating policies to promote
19 innovation. How do we test if we are on the right
20 path and does that test change by industry? So I will
21 open it up to everyone if you would like to join in.

22 MR. COTTER: Let me say, as far as the
23 patent system is concerned, one of its strengths, as
24 well as one of its weaknesses, is that the rules tend
25 to be uniform. In fact, we are largely locked into

1 that role as a result of international treaties and
2 that is probably a good thing. The TRIPS Agreement
3 forbids discrimination based on field of technology.
4 But it can also be a weakness because, of course, some
5 industries make larger investments of R&D compared to
6 others and so, in theory, the optimal system would be
7 one that tailored patent roles to the needs of
8 different industries.

9 But as a practical matter, I think that
10 would also induce a great deal of rent-seeking. Each
11 industry would then lobby on the favored one and so
12 maybe, on balance, it is better to have uniform rules,
13 but that means that the rules might be stronger than
14 necessary for some industries and perhaps not as
15 strong as they should be for others. The courts
16 however can and do, when applying patent doctrine,
17 apply them in somewhat different ways.

18 For different industries, for example, in
19 evaluating how much needs to be disclosed in the
20 patent document, I think it is fair to say as a
21 general matter that you need more disclosure in the
22 unpredictable arts of chemistry and biotechnology. So
23 there are some modifications that the courts can make
24 at the margin. To the extent we want more tailoring,
25 though, we may need to rely more on other policy

1 levers such as those that Arti Rai talked about, FDA
2 exclusivities and other tools.

3 MS. MUNCK: So, Tom, as we are thinking
4 about each of those issues, whether you would want to
5 have different grant terms for different arts or
6 whether the -- we should be looking at the patent
7 system together with other regulatory levers, what
8 questions should the FTC be asking to think about how
9 we can achieve our goal of protecting consumers in
10 this space?

11 MR. COTTER: Well, I think it all does come
12 down to the fact that any policy related to innovation
13 will have its benefits and its costs. It is going to
14 be very difficult often to quantify and to compare
15 those benefits and costs. But we need to see where
16 the evidence goes. So I think the FTC has done a very
17 good job, for example, in its study a couple of years
18 ago on patent assertion entities in assembling the
19 data and analyzing it. And that is what we really
20 need is the best empirical evidence we can find.

21 There are people out there who are telling
22 us now that patent trolls are a myth or that the
23 decision to go with a discretionary injunction
24 standard was a bad idea. Maybe those people are right
25 but you cannot ignore the evidence either and there is

1 some fairly good empirical evidence that patent
2 assertion entities have caused some social harms.
3 There is good evidence that patent holdup is a real
4 phenomenon not just some myth as it sometimes
5 dismissed.

6 But if the studies have been done
7 improperly, if they have reached incorrect
8 conclusions, then do better studies. I mean, but you
9 cannot ignore the studies. I think we really have to
10 focus -- patent law innovation policy is more closely
11 aligned with science than probably any body of law and
12 we should not ignore the norms of science. We cannot
13 make up our own facts; we cannot ignore the evidence.
14 Anecdotes are not data. Test, falsify, and see what
15 you come up with.

16 MS. MUNCK: Perfect. Thank you.

17 MS. RAI: So I just wanted to add -- and
18 this is very much along the lines of what Professor
19 Cotter has said -- that the possibility of
20 experimenting or at least evaluating in a very
21 rigorous way new interventions I think is one that is
22 -- one that the FTC does very well. And I am proud to
23 say that I think the Patent and Trademark Office, with
24 the introduction of Office of the Chief Economist, has
25 begun to do as well.

1 So for example, with the introduction
2 through the American Invents Act of 2011 of the Patent
3 Trial and Appeals Board, there is an opportunity to
4 learn as more decisions from that institution body
5 come down. And so for example, I think that the
6 recent -- what some might see as a bad course
7 correction but at least an interesting course
8 correction by the PTO towards moving away from the
9 broadest reasonable interpretation standard for claim
10 construction is based on some data, including data
11 that I have generated on the role that these
12 proceedings play in substituting for litigation and
13 the efficiency benefits, excuse me, that might be
14 realized by having the same standards of litigation in
15 the district court -- in Article 3 district courts and
16 administrative agencies.

17 So I think that is a course correction as
18 contrasted with perhaps some of the anecdota that
19 Professor Cotter was talking about that is based upon
20 data.

21 MS. MUNCK: Well, thank you. I am hearing
22 from both of you the role of empirical evidence in
23 promoting intellectual property research. Is there a
24 mechanism if you are sort of either beginning an
25 empirical project where you are trying to understand

1 the sort of foundations of the question that you are
2 looking at. What else can you look at as you are
3 beginning to develop that empirical approach?

4 So I am thinking like if we were to start to
5 look at an issue completely from scratch and we wanted
6 to have the empirical approach together with looking
7 at theory. How would we balance that? What would you
8 be thinking about in that space?

9 MS. RAI: So the concern with empirical work
10 -- and I have seen this in my own work -- is that it
11 takes a long time for the data to emerge and so we had
12 to wait until 2015 really to have enough data on how
13 the PTAB was actually being used before we could say
14 anything. And that does -- so, in theory, there was a
15 lot of pressure on the PTAB to say that, well, you are
16 operating -- because this is what Congress wanted you
17 to do, you are operating this way or that way. But
18 while all the loud voices were speaking,
19 unfortunately, it took a while to actually figure out
20 what was happening. And the loud voices always come
21 first.

22 MS. MUNCK: Yeah, and I guess that is the
23 delta that I am asking about. Is the approach to be
24 more conservative in that space or is the -- what do
25 you recommend?

1 MS. RAI: I am sorry. I did not --

2 MS. MUNCK: I guess what I am asking is you
3 were -- so let's take, for example, the PTAB, the PTAB
4 institutes in 2012 and the data starts to come in in
5 2015. What is the right thing for policymakers to be
6 doing with respect to the PTAB in that 2012 to 2015
7 space?

8 MS. RAI: It is a great question. And from
9 our standpoint, it was good that they maintained the
10 constant policy because then that did not mess up our
11 data. But that is obviously not -- should not be
12 their concern necessarily. But I think that is the
13 negative side of any new intervention one tries. One
14 does not know for a while whether it is actually
15 working, but that is just the reality. I think to
16 swing back and forth wildly without data is a bad idea
17 even if it can be frustrating sometimes to have to
18 wait.

19 MS. MUNCK: Thank you.

20 Professor Shu?

21 MS. SHU: I actually wanted to add another
22 aspect of adding to the delta is the data collection.
23 So in our study, we actually spent three years
24 cleaning up the patent data and matching to firm data
25 because the patent data does not have, you know,

1 identifier for the firms and the firm names are very
2 like, you know, self-entered, they are very noisy. So
3 turnstile matching the patent data to the firm data
4 was not a trivial effort.

5 So my larger point is that I think when you
6 think about the effectiveness of studies, the
7 measurement issue is very important. And on the
8 measurement issue, you should expose sort of cleaning
9 up the patent data, which I think USPTO has done a
10 great job. They have released the patent view which
11 is a great effort to, you know, clean up the data, as
12 well as I think the larger question of how to measure
13 innovation. So are patents the best measures of
14 innovation? I think it is one of the best measures we
15 have, but clearly does not measure all of the
16 innovation efforts.

17 So that actually relates to a question that
18 I want to ask the fellow panelists, which is what do
19 you think are the best measures of innovation and can
20 we do better than patents? And also R&D expenditures,
21 of course.

22 MS. RAI: I think that is a great question
23 and it is a question that we thought about a lot when
24 we were -- we, in our recent work, have looked more at
25 R&D expenditures or R expenditures and, of course, the

1 pushback to that is that, you know, that is just the
2 input. What we really care about is the output. And
3 so inputs are nice, but they are not really what you
4 want. And then the problem with patents as output
5 measures is well rehearsed.

6 So, yeah, I think that if we could actually
7 have more sophisticated measures, that would be very
8 much a good thing, and I take it that the National
9 Science Foundation has, at various points, tried to
10 come up with better innovation metrics and either
11 patents or inputs. But I do not know that any of that
12 has really led anywhere.

13 MR. COTTER: And, of course, the ultimate
14 goal is economic growth. I mean, going back to Paul
15 Romer and endogenous growth models, that innovation is
16 both an input and an output. So the ultimate goal is
17 not to increase the number of patents, but it is to
18 increase economic growth and patents are one tool for
19 doing that. But, you know, none of our ways of
20 quantifying or measuring innovation are perfect.

21 MS. RAI: Although we do know that total
22 factor productivity seems to have, at least on some
23 measures, declined, and that is probably not a good
24 thing in terms of innovation because innovation is
25 what TFP is all about.

1 MS. MUNCK: Professor Kovacic?

2 MR. KOVACIC: When you look at the
3 experience that a competition agency accumulates, and
4 the FTC is one of them, I think you see that they
5 accumulate the equivalent of big antitrust data. This
6 is a lot of information that comes from pursuing
7 individual cases, especially doing extensive
8 investigations and cases within a specific sector. It
9 does not always give you an insight from an
10 economy-wide perspective, but in looking at specific
11 agencies, I think it helps provide some insights to
12 the points -- for the points that we have been
13 discussing and maybe helps you start to creep up on
14 answers to some of these larger questions.

15 For example, in the area of aerospace and
16 defense, you see confirmation of Arti's point about
17 the crucial role that government funding plays in the
18 development of specific technologies. When the FTC
19 looked at the United Launch Alliance joint venture
20 proposal, a key question was would NASA give SpaceX,
21 which had not launched anything yet -- it had launched
22 ideas, but no hardware. Would NASA give SpaceX
23 contracts to do non-national security launches of
24 different kinds as a way of establishing its
25 credibility to become an effective supplier to the

1 whole range of government purchasers in the future?

2 The assumption that it was was a crucial
3 part of the decision to allow the United Launch
4 Alliance to be formed. And, fortunately, for U.S.
5 citizens and for the aerospace sector, that assumption
6 proved to be correct. But it was vital that the
7 public purchasing agency played the role that it did
8 in fostering the development of a new business model,
9 which has been, in many ways, a dramatic departure
10 from what existed before.

11 You could imagine that in sectors in which
12 the agency has been quite proficient that you do the
13 equivalent of industry studies; that is, you try to
14 reflect on the dozens of mergers done in the
15 pharmaceutical sector, which allow you to assess the
16 role of -- perhaps of research and development, the
17 significance of rivalry across different producers,
18 the fascinating role, the collateral regulators and
19 public policymakers, such as those in the Food and
20 Drug Administration, play in the development of the
21 sector.

22 You could go sector by sector where the
23 agencies have deep expertise and use the big antitrust
24 data that they have assembled to derive some
25 observations about how innovation takes place, what

1 role different forms of intellectual property
2 protection play and what role competition plays in
3 stimulating the development of those sectors. You
4 could go beyond that and develop the research agenda
5 that, again, is uniquely within the province of the
6 FTC. The FTC can get a lot of data. It can collect
7 information that would assist in providing answers to
8 a number of the questions that we pose.

9 How might you go about doing that? Allen
10 Fels, who was chair for many years of Australia's
11 Competition and Consumer Protection, but also a
12 specialist in public administration, said that public
13 agencies had to draw upon what he called coproducers
14 outside of their own walls to carry out their own
15 missions effectively. One that Allen identified is
16 the world of academic researchers. And you could
17 imagine a collaboration in which the academic
18 researchers assist you in putting together what the
19 research agenda could be. The FTC helpfully does have
20 a microeconomic policy conference every year, which is
21 a way to try and draw academics into the development
22 of research projects that are supportive of public
23 policymaking.

24 But you could imagine that one way to
25 formulate the FTC research agenda would be in a more

1 systematic and elaborate way to draw upon researchers
2 and ask, if you could get the data, what would you
3 like to have to assist in formulating what the
4 specific research project would be? And then the
5 FTC goes about carrying it out. With its budget, I
6 would not suggest that the FTC can do a Manhattan-like
7 examination of the economy and all it contains and all
8 of its origins and sources.

9 But you could imagine taking the big
10 antitrust data that the agencies have themselves to
11 look at specific industry evolutions, plus, the
12 collaboration with researchers in a variety of
13 settings on the outside to go about formulating the
14 research agenda that would enable you to go forward
15 and start to answer some of these questions, again
16 using capabilities that are uniquely within the FTC's
17 own mandate.

18 MS. MUNCK: I think that is an interesting,
19 point, thank you. Because, you know, as we were doing
20 the PAE study, one thing we need to do is to talk to
21 our colleagues at OIRA to convince them that the
22 benefit of the burden that we are placing on
23 businesses outweighs the cost to the business. So I
24 think the idea of leading with academic research or in
25 the case of the PAE study, we led with a workshop that

1 told us that that data was not available. I think
2 that is an interesting model.

3 MR. KOVACIC: And I think if you ask across
4 the whole span of government institutions in the
5 United States, which one has the greatest capability
6 to do applied industrial organization research in a
7 way that provides a mechanism for injecting it into
8 the mainstream of policymaking, I would say the FTC
9 has an unequalled capacity to do exactly that kind of
10 work. And I realize it is not cheap, it takes time,
11 and the results are not easily predictable.

12 But what impresses me from the past
13 experience is that the careful effort has been used
14 before to formulate a topic. To identify the focal
15 points gives you a strong likelihood of coming up with
16 the result that justifies the advice and guidance that
17 you gave to OIRA in formulating the projects.

18 MS. MUNCK: Well, thank you. I would like
19 to turn it over to John, my colleague in the Office of
20 Policy Planning.

21 MR. DUBIANSKY: Thank you. I think as the
22 panel has so helpfully pointed out, when we think
23 about both our own policymaking and empirical research
24 tools and agenda, it is helpful to think that,
25 oftentimes, questions of innovation do extend beyond

1 simply the patent space.

2 So I have a question on really the role of
3 government in promoting innovation a bit more broadly
4 and perhaps Professor Rai, you may want to field this
5 first, and that is, looking at the past 20 years, what
6 can we learn from earlier government efforts to
7 promote innovation and, in particular, how can we use
8 these lessons going forward?

9 MS. RAI: Well, the first point I would make
10 is a point I hesitate to make because I am not a -- I
11 have not studied Congress intensively, but this is a
12 point that relates to Congress. So one of the points
13 we make or my colleague Steve Merrill made in writing
14 the research imbalance report was that the rising
15 above the gathering storm report, which was probably
16 one of the National Academy's most famous reports
17 regarding the challenge in physical sciences and
18 engineering, in particular, was issued in 2007. It
19 called for a doubling of Defense Department spending
20 for the physical sciences and engineering.

21 And the America Competes Act followed
22 swiftly and it was just actually, for some of us who
23 were looking at it, just a remarkable kind of piece of
24 legislation to follow so swiftly from a policy
25 recommendation by an esteemed body like the National

1 Academies. Unfortunately, the appropriators did not
2 appropriate the money because the budget politics got
3 in the way. There were caps on discretionary spending
4 imposed in the 2011 Budget Control Act.

5 So I think one of the challenges is we know,
6 I think in some cases, what the right answer is, but
7 it is really hard to get all the ducks in a row to get
8 it implemented -- speaking of -- Suzanne, you were
9 talking about how to do things quickly -- to get
10 things implemented quickly would have been great had
11 the doubling actually occurred in the seven years that
12 the America Competes legislation authorized, so NSF
13 and NIST and the DOE Office of Science would have
14 gotten the money, but it did not.

15 And not until 2018, just a few months ago,
16 did we get some significant infusion of resources into
17 those offices, which I think all of us would say is
18 really critical no matter what one's politics are for
19 our future innovation economy. It is sad that it took
20 more than ten years.

21 MR. DUBIANSKY: Building on that for a
22 moment, what bodies within the Government are best
23 poised to advocate and ensure the completion of these
24 sort of initiatives?

25 MS. RAI: So I hesitate to bring up that

1 particular example because I know the FTC does not --
2 that is not a space that really plays in funding for
3 basic research necessarily. But it is a sort of
4 example. So, yeah, I mean, I think that there are
5 different agencies that could help to advocate. NIH
6 has done a very good job of advocating for itself in
7 the life sciences. I am not sure why NIST and some
8 other of these agencies have not done as good a job.
9 I am not sure that the FTC could play a role.

10 But it is something that has struck me as a
11 real -- having gone into the Obama Administration
12 after the America Competes legislation passed and then
13 seeing it just languish for so long, it struck me as a
14 real problem. So I do not know that the FTC, per se,
15 can do anything, but certainly it seems to me that DoD
16 could perhaps have done more. I do not know if it
17 could have or not, and that is why I sort of hesitate
18 to jump with full feet into how one influences
19 Congress. But that is a point that I thought was
20 worth highlighting.

21 MR. DUBIANSKY: Perhaps we will go down in
22 the opposite direction this time. So, Professor
23 Kovacic, do you have anything to add on experiencing
24 the past 20 years of the role of the Government in
25 promoting innovation?

1 MR. KOVACIC: I think there are interesting
2 observations that you can derive from some of the
3 experiences of both the FTC and the Department of
4 Justice and some of their peer institutions abroad. I
5 think the hesitation in talking about it is that they
6 are not broadly systematic. There are idiosyncrasies
7 in each area that perhaps make one very cautious about
8 drawing conclusions. But there are still interesting,
9 I think, observations that can come from looking at
10 the industry histories, which, at least in an informal
11 way, start to emerge from the examination of what
12 specific industries have done over time.

13 Arguably, the Federal Trade Commission has
14 been focused very intently on the pharmaceutical
15 sector since the late 1940s. That is a long period of
16 observation. Countless mergers, nonmerger matters,
17 remarkable case records developed, hearings and other
18 proceedings that contribute to this. I guess a matter
19 of methodology, a challenge, something that might be
20 done is how do you integrate everything that you have
21 learned from these kinds of experiences into
22 formulating a broader view about what matters?

23 I think if we looked at, for example,
24 defense and aerospace and you look at the fascinating
25 transactions that the FTC has examined, you see the

1 intersection of public and private initiative that I
2 think allows you to identify, for example, the
3 Government's formative role as a buyer, not simply as
4 the provider of what might be called R&D subsidies,
5 but its role as a purchasing authority and how
6 significant that can be.

7 The role of the Government in doing its
8 own organic research and development, going back to
9 the days of the Advanced Research Projects Agency
10 and Vinton Cerf, who was a young contributor to that
11 team at the time, and that is the origin of the
12 internet. In many fundamental ways, those were
13 government-sponsored efforts. So I do not know if the
14 Commission, for example, or the Department of Justice
15 could provide a systematic set of recommendations
16 about what matters. But I think that there are
17 exceedingly interesting observations that can come
18 from having watched and touched these agencies in so
19 many different ways.

20 Defense and aerospace I think is a
21 fascinating example of how that works, but also
22 pharmaceuticals is another area where the Commission
23 has been deeply involved. And a step one could take
24 would be how do we take, again, this vast body of
25 antitrust big data, an experience one has collected

1 over time, and maybe look at the specific topics more
2 intently and systematically, not all industries, but
3 to pick a few, and to try come up with some better
4 answers, answers that I think bear out, you know,
5 Tom's comment about how you get different results or
6 you have different significance based upon what
7 industry you are in.

8 I think you would verify a number of the
9 observations that these and other scholars have made
10 about how the IP system, for example, affects
11 innovation. But I think there is a lot of fascinating
12 information that would come from a deeper examination
13 of experience with the body of big antitrust data that
14 the agencies have and that they can collect without
15 tripping the GDPR.

16 MR. DUBIANSKY: Thank you. Professor Shu?

17 MS. SHU: So since Bill mentioned defense
18 and aerospace, one interesting example that came to me
19 was that, you know, the event of moon landing actually
20 inspired a lot of young kids to study STEM and become,
21 you know, potential innovators. That suggests to me
22 that sometimes government interventions can have not
23 just necessarily unintended consequences, but
24 consequences that can be felt in the longer term. And
25 I think this -- think about the supply side, so not

1 just a demand for innovation, but the supply of
2 innovative talent is important.

3 And in some of my other research looking at
4 the MIT alumni and how they choose careers and how
5 they become innovators, one interesting sort of
6 finding that emerged was that people's interest in
7 becoming innovators, especially in science and
8 engineering, those kind of interests form very early.
9 So the role of government in there, you know, I think
10 is interesting to think about. And maybe sometimes it
11 is not explicitly targeted at those groups, but some
12 of these policies, such as the moon landing event, are
13 inspiring a new generation, I think. Those are
14 interesting sort of -- not side effects I would call
15 them, but interesting effects to think about.

16 MR. DUBIANSKY: Thank you. I think it is
17 very interesting to raise education as part of this
18 discussion as well.

19 Professor Cotter?

20 MR. COTTER: Yeah, I think I would just echo
21 what the other panelists have said. From my own
22 standpoint, it is very easy to be focused on patents
23 and copyrights and how important the patent and the
24 copyright system are, and they are important.
25 Certainly changes in patent or copyright doctrine can

1 move the needle and either induce a little more
2 innovation or a little bit less and those are
3 important things. But I think it is probably equally
4 and perhaps more important to think about the role of
5 both government and private entities in sponsoring
6 basic research for which then the patent system is
7 designed to come up with applications.

8 It is great to have a culture of
9 entrepreneurship and education, freedom to think, to
10 collaborate, have a conversation where nobody is
11 exclude. I think all of that is probably more
12 fundamental to creating a culture of innovation than
13 anything else.

14 MS. MUNCK: Well, we have an audience
15 question -- actually, a couple of audience questions
16 for Professor Shu. People are asking, please explain
17 the different results with respect to the EU in
18 developing countries versus the U.S. in terms of the
19 positive impact of increasing competition from China.
20 And that ties into another question that we were going
21 to ask about sort of as economies become more global,
22 how do you balance the domestic nature of intellectual
23 property and other laws of global competition.

24 So I think first I would like to, if we can,
25 go back to slide 13 and I think we can do that by just

1 going backwards.

2 MS. SHU: Okay.

3 MS. MUNCK: So I would love to have you
4 address that point.

5 MS. SHU: Thank you for the question.

6 So the main -- so, essentially, the
7 measurements are very similar. So how we measure our
8 Chinese import competition and the source of
9 variations are similar in the studies. So I would say
10 there are potentially three explanations for the
11 different findings on the passive versus negative
12 impact. One is that the intensity of increase in
13 competition is a little bit different. Arguably, the
14 U.S. experienced the most increase of the influx
15 Chinese import competition and the intensity might be
16 a little bit less in Europe and developing economies.

17 And the second, and perhaps most
18 importantly, the nature of competition, the hallmark
19 in the home market is different. So in the U.S. --
20 and this is more of speculation and I think it is
21 worth actually examining more with data, arguably, the
22 U.S. market started out -- and there is some evidence
23 for this -- the U.S. market started out more
24 competitive than the European and the developing
25 economies market. So if you are already in a very

1 competitive market and you have a huge influx of
2 increasing competition, that tends to generate more
3 incentives to contract and even exit the market than
4 to innovate as a way to escape competition.

5 On the other hand, if you are in a market
6 that is starting out not very competitive and you have
7 a little bit of increase in competition, that actually
8 would -- generates increased incentives to innovate as
9 a way to escape competition as opposed to, you know,
10 exiting the market.

11 And finally, I think, again, this is
12 speculation, that there are perhaps some differences
13 in managerial slacks across different economies,
14 perhaps most slacks in developing economies. They are
15 potentially furthest away from the production
16 frontier, so there is a lot of efficiency gains from
17 this increasing competition, whereas the U.S.,
18 especially public firms, are probably already very
19 efficient and have not much managerial slack. So the
20 -- sort of the efficiency gained from competition is
21 not as much.

22 MS. MUNCK: Thank you very much.

23 And just sort of staying -- we have about
24 ten more minutes for discussion and then I want to
25 make sure that I save two minutes for your statements.

1 So if anyone has anything they would like to add on
2 this global question, I would like to do that.
3 Otherwise, I have a few other audience questions that
4 I would like to address.

5 MR. COTTER: I would say, and there is, to
6 my understanding, a fair amount of evidence that
7 patents affect different countries in different ways
8 as well. So whether it is a good idea for, say,
9 developing countries to have patent systems very
10 similar to those we have in the Western nations as is
11 required under the TRIPS Agreement, I think there is a
12 fairly substantial body of evidence that at least once
13 a nation reaches a certain stage of development, that
14 having a good patent system in place can be very
15 useful in attracting foreign investment, foreign
16 technology transfer, in developing domestic innovation
17 perhaps to some degree, but that may not be true
18 across the board.

19 So, once again, you know, we have a
20 one-size-fits-all patent system and that is not always
21 optimal on an industry-by-industry basis or on a
22 country-by-country basis. At the end of the day,
23 maybe it is the best we can do, but there are
24 definitely some drawbacks.

25 MS. MUNCK: Well, thank you.

1 MS. SHU: One thing I do want to add on the
2 global aspect, that, you know, one question that our
3 study raises is, you know, do U.S. firms shifting
4 their R&D and innovation to other parts of the world,
5 especially the multinationals. On the U.S. patent
6 data, we do not see that. So we have not seen
7 evidence of, you know, a huge increase of patents from
8 China, although there is an increase, but not
9 overwhelmingly.

10 But I think that is sort of an interesting
11 followup question to think about that is the locus of
12 innovation shifting around the world globally.

13 MS. MUNCK: Terrific, excellent.

14 Well, as you can see, John and I are looking
15 at a number of questions that have come in from the
16 audience and trying to figure out how to balance that
17 with time, but I want to sort of make a pitch for the
18 public comment period. So if anyone is listening to
19 things as we are discussing issues and you would like
20 to hear more or raise points for the FTC, please be
21 sure to file a public comment.

22 I think with the last really five or six
23 minutes before we turn to your statements, I would
24 like to go back to Chairman Simons' ask that we
25 continue to explore the role of the FTC and how we are

1 doing our job. I know, Bill, that he quoted you in
2 that statement and that has also been a position of
3 yours --

4 MR. KOVACIC: You cannot do that enough, I
5 think.

6 (Laughter.)

7 MS. MUNCK: So I think really my question to
8 you is, you know, for the past 20 years -- more than
9 20 years, pardon me -- the FTC's IP policy and
10 enforcement efforts have focused on the role that
11 competition and intellectual property law play in
12 promoting innovation. And our tools include, as we
13 have mentioned, 6(b) studies, hearings such as this,
14 participating in amicus briefs. I think we need to
15 ask, have we gotten this balance right and what should
16 the FTC be thinking of as we move into the next 20
17 years?

18 MR. KOVACIC: I think the habit of
19 reflecting on a regular basis on the views of astute
20 observers, like my colleagues here, about how policy
21 is developing and having a conscious process of
22 collecting views on that is the best process-related
23 antidote that you have to a bad path dependency with
24 respect to any set of ideas. So I think the culture
25 and custom of the process of public consultations as

1 provided -- will continue to provide for an open-
2 minded institution, the best way to continue to make
3 adjustments and refine.

4 I think as we all sense in the area there is
5 an inherent amount of experimentation that takes place
6 in setting policy the right way. I am reflecting on
7 my colleagues' comments here. I think that some
8 measure of experimentation is inevitable.
9 Experimentation involves success and failure. I am
10 not aware of success experiments that invariably
11 point toward success. They involve policy failures as
12 well.

13 And there is no shame in the failure. The
14 shame is in committing the same failure again and
15 again when you ought to have some idea of making a
16 change. So I think the virtuous cycle, which I see
17 established in the agency's work, is one of
18 acknowledging the experimentation with respect to its
19 own policies and those of others; periodically and
20 regularly assessing the consequences of that, and I
21 echo all of my colleagues' endorsement of a habit of
22 spending resources on after-the-fact assessment. And,
23 third, making refinements based on what the assessment
24 tells you.

25 My sense is that that has become the culture

1 and the habit of the agency. That is a norm, as
2 academics call it. That is not a regulation that
3 tells you you must do things that way. I think that
4 is the best possible insurance that you will have a
5 process of adjustment and reflection that points
6 towards needed improvements over time.

7 MS. MUNCK: Thank you. I think we have a
8 couple of minutes if anyone else on the panel would
9 like to address that. Otherwise, we can move to
10 closing statements.

11 Terrific. So I realize that I am asking you
12 to criticize me while I am sitting right here, so I
13 can appreciate that that might not be something that
14 people would want to engage in, but I also keep
15 plugging the public comments because I think that
16 there people have raised a number of issues that might
17 not fall in the spectrum of criticism, but certainly
18 fall in the spectrum of here is how you have been
19 looking at things. Here is how the economy has
20 changed and here is how you might want to look at
21 things going forward. So I want to encourage everyone
22 to think about that as they file public comments in
23 this space.

24 So, now, as promised, I would like to ask
25 each of the panelists to spend a couple minutes

1 talking about sort of either your closing statements
2 or what you think the FTC should be focusing on as we
3 move forward in this space because we have been
4 talking a lot about a number of different issues. As
5 I mentioned at the beginning, innovation is not
6 heterogeneous and so -- it is not homogenous; it is
7 heterogeneous, pardon me. So I would be really
8 interested in your thoughts.

9 MR. COTTER: So I have just three brief
10 points to make. One is that invention and innovation
11 are very, very important to improving the human
12 standard of living, and to the extent the patent
13 system and other aspects of innovation policy can
14 improve that, that is what we need to be focused on.

15 It is important to honor and recognize the
16 contributions of inventors, but the overarching goal
17 is to promote the progress of the useful arts, as
18 stated in the Constitution. Patents are one means to
19 that end.

20 Secondly, patents are not a guarantee that a
21 firm will recoup its research and development cost,
22 but rather patents provide an opportunity to do that.
23 But, ultimately, the market will decide whether an
24 invention contributes enough that it was worth
25 undertaking.

1 And then third, and I think this follows up
2 a lot from what Bill just said and from what the other
3 panelists have said as well, it is important to
4 experiment, not be too sure of ourselves. Again,
5 patents and innovation policy, more generally, is the
6 most closely related area to science, and the hallmark
7 of science is that we cannot just assume that we know
8 how the world works. So we formulate hypotheses, we
9 test them, and if evidence refutes them, then we
10 change them and we move on, and that is the way good
11 science is done and that is the way good policy should
12 be done as well, particularly in this area.

13 MS. RAI: So I have three points as well,
14 although I had four and you took one of my points,
15 which is experimentation and we have all talked about
16 that. I do think that it is important in a time when
17 people tend to have strong points of view on almost
18 anything to realize that strong points of view should
19 always be subject to what my colleagues in economics
20 called Bayesian updating. You update based upon what
21 you see the evidence as.

22 So the three points I have are as follows:
23 In accord with what I said regarding the role of
24 public funding, in particular, in fiscal sciences and
25 engineering and the relationship that public funding

1 and/or public procurement has with the patent system,
2 I think we do need more research there, and I say that
3 not simply because I would like more data on which to
4 do research, but I think that unfortunately the data
5 that is available on how the, for example, academic
6 funding has translated into commercial products, which
7 is another metric one could use, commercial products,
8 is hard to find because the information such as it is
9 is in a database called iEdison, which is not
10 accessible to researchers outside the Government or
11 even, as far as I can tell, to some researchers in the
12 Government.

13 So it seems to me that if we can gather more
14 data on how public sector funding has eventually led
15 to the creation of products beyond the great
16 anecdotes, which I think are fantastic about the
17 internet, we know that there is a lot going on there,
18 it would just be great on a more micro scale to know
19 exactly how that has worked and that requires open
20 data, which is something that, unfortunately, academic
21 institutions have not been eager to get behind. They
22 do not want their licensing strategies and so forth
23 scrutinized very much. So that is one point.

24 The second point relates to trade secrecy.
25 I think that the evidence suggests -- and I do not

1 have a definitive answer on this, but the evidence
2 suggests that but trade secrecy is becoming more
3 important and it is really hard to study for obvious
4 reasons. But if there is a way that government
5 agencies, including the FTC, could study the role of
6 trade secrecy, including in a global environment, more
7 assiduously, to the extent that we are concerned that
8 trade secrecy has become -- or concerned or just
9 recognize that trade secrecy has become more important
10 to certain players who think that patents cannot be
11 enforced in some jurisdictions, we really need to
12 study how that is working and if that is a problem for
13 purposes of the cumulative innovation, in particular,
14 because trade secrecy obviously cannot encourage
15 cumulative innovation in the same way that patents
16 can. So that is the second point.

17 The third point just follows up on something
18 that Professor Kovacic was saying regarding all of the
19 data that you guys have on particular industries, and
20 I am just going to make a pitch for perhaps
21 investigating more closely whatever data you have on
22 the pharmaceutical industries, including the
23 biopharmaceutical industry, because it does strike me
24 that there we have something of a metric of output
25 that is useful. New drugs, new molecules as opposed

1 to small variations on existing molecules and/or new
2 biologics.

3 And it is interesting to me that there has
4 been a huge shift in the pharmaceutical sector away
5 from so-called small-molecule drugs to these big
6 biologics and those things are really expensive and
7 are going to blow up our healthcare budget, as far as
8 I can tell. So that may be something to watch.

9 MS. SHU: Thank you. I want to also echo
10 my fellow panelists on the importance of
11 experimentation measuring the effectiveness. I only
12 have one point to add, which is that I think there is
13 a lot more to do, especially in the academic research,
14 in understanding the role of U.S. firms that plays in
15 global competition and global innovation.

16 So what we have studied, the impact of
17 import competition and, you know, the innovation
18 outcomes of U.S. firms, is only one aspect of the
19 trade liberalization. So, surprisingly, in my
20 literature review with my coauthor, Claudia
21 Steinwender, we actually saw very few studies that
22 look at the impact of export opportunities on U.S.
23 firms' innovation outcomes. So U.S. firms actually
24 have enjoyed quite a bit of increasing access to
25 foreign markets, including China, and how that affects

1 innovation, I think, based on evidence using data from
2 other countries, it is pretty overwhelmingly positive
3 evidence on innovation outcomes. But we have yet to
4 see a study or more studies using recent U.S. data.

5 Secondly, also, U.S. firms also introduced
6 competition to foreign markets. So how that increased
7 competition affects the innovation and productivity of
8 foreign firms, that is also an open question. And I
9 think all of these are interesting because it also is
10 related to thinking more critically about the nature
11 of competition, for instance, whether competition
12 enters from the high-end of the market versus the
13 low-end of the market. Those probably also have
14 different impacts on innovation as well and that is
15 another open area for research.

16 So there are many great opportunities and
17 open research questions and I am really glad to hear
18 the FTC's interest in research and experiments and
19 rigorous studies.

20 MR. KOVACIC: I would like to make a pitch
21 for three types of investment. First, the continued
22 investment in building knowledge of which this set of
23 proceedings is one part, but the continued investment
24 that would be the equivalent of a high-technology
25 company investing in its capability and its people to

1 do work over time.

2 I realize there is a tension for a public
3 policymaker. This kind of work does not generate
4 observable results. It does not produce
5 ribbon-cutting ceremonies where you can say, I sued
6 this company, I collected this fine, I did this, that
7 and the other thing. It is an act of faith in many
8 respects.

9 But I think in our community and certainly
10 within the agency, a question to be asked every year,
11 it almost should be broken out in the budget, what is
12 the R&D budget? That is, how much are you investing
13 in R&D to become smarter and wiser about the way the
14 world works and share the results of that? So I think
15 that is -- investment, number one.

16 Number two, investment in building the
17 synapses that exist already but can be expanded with
18 researchers outside the walls of the institution. You
19 take a public institution that has a unique capability
20 to perform this convening and research and analysis
21 role, none other like it, you have a higher education
22 system that has no peer in the world. Education, yes,
23 has a few uneven spots here and there. At the higher
24 ed level, would you swap it out for anyone else's? I
25 do not think so. And to draw upon that uniquely

1 remarkable resource to help formulate and carry out
2 the research agenda is a useful investment.

3 Last, the investment in building the
4 relationships with other public institutions. So,
5 Suzanne, you mentioned how the PTO has been involved
6 in all matters related to innovation, IP, convening
7 events and things of that kind. The FDA relationship,
8 as well, very important. I would add one to the list,
9 the U.S. Department of Justice Antitrust Division.

10 When we look overseas, it would be nice if
11 there were policies that seemed perhaps coherent. And
12 I realize maybe there is a real benefit that they are
13 not completely coherent and that there is some contest
14 for views. I would like to have the sense that when
15 that contest occurs, the text drafts are exchanged in
16 advance before the contest takes place in the public
17 arena of ideas. That should be an ongoing deep
18 collaboration between the two agencies.

19 MS. MUNCK: Well, terrific. Thank you very
20 much. And please join me in thanking the panelists
21 and my co-moderator, John Dubiansky, for the panel
22 this morning. We will reconvene at 11:00. Thank you.

23 (Applause.)

24 (Panel concluded.)

25

1 UNDERSTANDING INNOVATION AND IP IN BUSINESS DECISIONS

2 MS. MUNCK: Welcome back to our second
3 panel, which will be exploring understanding
4 innovation and IP in business decisions. My
5 colleague, Elizabeth Gillen, and I will be your co-
6 moderators this morning. And we have assembled a
7 fantastic panel -- I am a little biased, but I think
8 they are a fantastic panel of folks who have various
9 levels of experience and various sort of personal
10 experiences looking at the role of early-stage
11 invention and looking at the role of investment and
12 looking at the role of intellectual property.

13 So the panel that we just completed was a
14 very academic view. Now, we are pivoting to a little
15 bit more of a business view. And I am thrilled to
16 introduce Nicole Morris, who is with Emory. She also
17 has a deep background in sort of the practical aspects
18 of intellectual properties working at several
19 companies. We have Michal Rosenn, who is from Expa,
20 who also has experience with Kickstarter; Greg
21 Raleigh, who will be talking about his experience as
22 an inventor and his experience with New Enterprise
23 Associates; and we will also have Talal Shamon, who
24 has just a breadth of experience in a number of
25 different areas and he is with us today from

1 Intertrust.

2 So as I mentioned, each of you have
3 experience with the business considerations necessary
4 to bring innovative products to market. So I would
5 like to begin by asking each of you to spend
6 approximately ten minutes addressing the relationship
7 between innovation, intellectual property and
8 competition as you have seen it in practice.

9 And, Nicole, I would like to begin with you,
10 please.

11 MS. MORRIS: Sure, thank you. I just want
12 to say thank you for this invitation to be part of
13 this really discussion, and also I am just honored to
14 be up here with these really dynamic speakers.

15 The previous panel did an excellent job sort
16 of laying out the foundation of some of the innovation
17 policy concerns. So my remarks will really focus on
18 my work with entrepreneurs and early-stage technology,
19 particularly early-stage technology originating from
20 universities and research institutions.

21 And as Suzanne mentioned, I will also draw
22 upon my experience from working at multinational
23 organizations as a researcher and then later on as
24 managing patent council.

25 So universities and research institutions

1 play an important role in promoting innovation.
2 Academic technology transfer is what is driving that
3 economic development. The data that I will cite comes
4 from the Association of University and Technology
5 Managers, and their report that I am looking at this
6 morning is from 2016. We are waiting on the 2017
7 data. It takes a little while for them to aggregate.
8 But it is about 195 different universities, research
9 institutions and also university hospitals, which tend
10 to be a real source of innovation for the
11 pharmaceutical industry.

12 So in 2016, the AUTM report or AUTM survey
13 stated that there were over 1,000 startup companies
14 formed out of the university technology. In addition,
15 the data shows that the U.S. research institutions
16 continue to develop and invest in intellectual
17 property that arises from the academic research. The
18 federally funded invention disclosures grew about 6
19 percent in 2016. So that is pretty important. If you
20 think about federally funded research, we are talking
21 about NSF, NIH, and those types of grants that are
22 critical to most of the academic research labs
23 anywhere in the U.S.

24 So these discoveries borne out of the
25 university research can lead to more impactful applied

1 research and new commercial products. The invention
2 disclosure activity really is what drives or what we
3 would track as a measure of the key indicator of
4 levels of innovation and this continues to rise.
5 Disclosure activity over the past five years has
6 jumped about 4 percent. And then these disclosures
7 are what will eventually lead to patent filings.

8 Provisional patent findings are up about 5
9 percent, and this is data from 2015 then to 2016. And
10 then the overall patent filing activity continues to
11 increase.

12 I will just drop a footnote here. One of
13 the things that the AUTM report highlighted -- and I
14 noted this when I was in practice -- we are seeing a
15 ton of activity for patent filings in the U.S.
16 originating from foreign actors or foreign entities.
17 So that also is kind of a big driver of the
18 innovation, and the panel that presented before us
19 commented particularly on some of the global
20 challenges that we are seeing, and I think at some
21 point during our discussion today, that is a key
22 driver for competitive activity that is hard to really
23 quantify but is definitely relevant and you see it
24 play out anecdotally.

25 So my last comment would just be to close

1 and say that from the university standpoint there is
2 lots of activity going on and we are seeing not only
3 in the graduate, federally funded research area, but
4 the undergraduate sort of innovation activity is
5 starting to really creep up and play a role in either
6 startups or just new companies forming from academics.
7 So that is where I will close and let my other
8 panelists talk.

9 MS. MUNCK: Wonderful, thank you.

10 Michal, I would like to turn to you.

11 MS. ROSENN: So thank you, Suzanne and
12 Elizabeth and everyone at the FTC. As well as my
13 fellow panelists, I am very excited for the
14 conversation today.

15 So I am speaking to you today as a
16 representative of a company that is working to bring
17 ideas to life. So at Expa, we are bringing together
18 entrepreneurs and creating the environment that allows
19 them to bring their companies to life at the earliest
20 stages. We have partners who work on ideas at those
21 earliest stages of ideation. We help to fund them
22 through their R&D phase and build them out into
23 independent entities.

24 We also work with outside founders who have
25 a marketable idea and are looking for their first

1 funding, as well as for a community that is going to
2 help them through the unknown territory of starting a
3 company. And finally, we also find projects that are
4 just getting off the ground looking for capital to
5 take themselves to the next stage.

6 Before I joined Expa, about a year ago, I
7 was general counsel at Kickstarter, the crowd-funding
8 company. And there what we were doing was providing a
9 platform for creators who actually kind of, similarly
10 to Expa, were looking to bring their ideas to life.
11 They appealed to Kickstarter's community of backers to
12 accomplish that goal, to find people who were willing
13 to back this idea that they put out there and they
14 would like to bring to life.

15 So based on my experience both at Expa and
16 at Kickstarter, I have absolutely seen the power of
17 intellectual property. I see that it is a valuable
18 aspect for a company and how through strong trademarks
19 and patents, a company can develop a brand, as well as
20 an IP portfolio that puts it in a good position to
21 face competition, as well as to attract capital.

22 More often though, I will say that the role
23 that I have seen the IP system play with early-stage
24 companies is as a weapon used to stifle innovation at
25 its earliest stages. So both small projects just

1 getting off the ground with crowdfunding or companies
2 that are at their earliest stages of development at
3 Expa have been targeted by patent trolls. These are
4 holders of low-quality patents who are using extortion
5 essentially as a means of extracting value from their
6 intellectual property.

7 And I know that my experience is not unique.
8 That is why in a survey of 200 venture capitalists
9 just about a year ago, 100 percent indicated the
10 presence of just a patent demand letter, not even
11 litigation, just a demand letter as a major deterrent
12 in deciding whether or not to invest in a company.
13 And it is why 150 early-stage venture capitalists
14 recently signed on to a letter urging Congress to
15 address the patent troll problem.

16 So a properly functioning patent system
17 requires this delicate balancing between innovation
18 and competition. But from my perspective, and I hope
19 to expand on this in our remarks today, is the
20 balancing has gotten dangerously out of whack as
21 low-quality patents have proliferated in our system.

22 So as we begin today's conversation and
23 engage in I think what will be a spirited debate on
24 these issues, I want to be clear about what it is that
25 we are discussing here. We are talking about a patent

1 system in which an average of 40,000 software patents
2 are granted each year and those patents are often laid
3 out in unreasonably vague terms. Take that together
4 with the fact that there is no easily searchable index
5 of patents nor is there a real consistency in
6 definition used across patents. And you can see why
7 startups and small businesses often face no chance
8 when they are confronted with a lawsuit.

9 We are also talking about a handful of
10 reforms that have been passed in the last few years
11 that have laid the groundwork for a better-functioning
12 system. The America Invents Act, which passed after
13 nearly a decade of negotiation in Congress, you know,
14 hearings, bicameral hearings, bicameral negotiations,
15 this set up a system that allows for a more fair and
16 efficient method for startups and small business to
17 defend themselves against spurious claims of patent
18 infringement.

19 So the AIA established something that is
20 called the inter partes review, or IPS, and this is
21 essentially a system that is explicitly designed to
22 ensure that the weakest patents are targeted. First,
23 as of the end of 2016, only .002 percent of active
24 patents were subjected to IPR proceedings. Of those,
25 55 percent were electronic or computer patents, 29

1 percent were mechanical or business method. Those are
2 the patents where we generally find the weakest
3 patents, very low-quality patents. Only 7 percent of
4 patents challenged in IPR proceedings were in the bio
5 and pharma fields.

6 So the IPR system does not just benefit
7 startups and small businesses who are challenging
8 the patent's validity, it also directly benefits
9 patent holders who are advantaged by a well
10 functioning system that produces high-quality patents.
11 In fact, innovation has flourished since the AIA was
12 passed. In the past five years, the U.S. has risen
13 from tenth to fourth in the global innovation index
14 and R&D spending in the U.S. has risen significantly,
15 seeing a 44 percent increase between 2012 and 2017.

16 Finally, we are also talking when we talk
17 about reform about a couple of recent Supreme Court
18 decisions, in particular, their decision in a 2014
19 case called Alice Corp. v. CLS Bank, in which the
20 Court ruled in favor of decreasing ambiguity and
21 vagueness in software patents. So in that case the
22 Court held that otherwise unpatentable abstract ideas
23 do not suddenly become patentable simply through the
24 application of a general computer system. The Alice
25 case and its progeny have really helped small

1 businesses in fighting patent trolls at the earliest
2 stages of litigation. And I speak from personal
3 experience where at Kickstarter, we were able to
4 invalidate a patent that had been asserted against us
5 using precisely the Alice decision.

6 Now, this really decreases the costly
7 endeavor of staying in business but it certainly does
8 not eliminate it. You are still going through
9 litigation and still going through motions to dismiss
10 and are likely spending several hundred thousand
11 dollars in the process, but it is a good step forward.

12 So finally, I would just like to say it is a
13 truism to say that -- to talk about the incredible
14 pace of innovation. But it is a truism because it is
15 true and innovation these days simply does not look
16 like what innovation was like in the 18th Century or
17 19th Century. And our outdated patent system has
18 permitted bad actors to stifle development of new
19 ideas and to drown out legitimate inventors.

20 A handful of reforms that have come through
21 Congress and through the courts in the last few years
22 have been absolutely necessary for steps to address
23 the problems that face startups and small businesses.
24 And we should build upon these reforms and look for
25 ways to further modernize the system and allow it to

1 keep pace with the direction that innovation has been
2 moving for decades. Thank you.

3 MS. MUNCK: Thank you, Michal.

4 And, Greg, I know that you have slides. So
5 if you would like to take it from there, I can hand
6 this down to you.

7 And, also, if you are not using your cell
8 phone, if you could move it away from your microphone.
9 I think that that is giving us some interference.
10 Thank you.

11 MR. RALEIGH: Well, great. Thank you,
12 Suzanne, for inviting me. I am here to provide the
13 perspective of someone who has been an inventor for
14 well over 30 years. I have also been an entrepreneur
15 at three startups that made some of the world's most
16 important wireless technology that we all use today,
17 roughly 3 or 4 billion devices.

18 And now, I am a venture advisor at NEA, one
19 of the world's largest venture capital firms. We
20 invest in everything from life science to tech, from
21 seed to pre-IPO. We specialize primarily in Series A
22 and Series B. And one of my main roles there is to
23 evaluate deep technology, most of which requires some
24 form of patent protection to invest in.

25 I think this is a fabulous one-two punch

1 here because I believe -- Michal believes everything
2 she just said. This is the argument that -- all of
3 these are patterned directly after the arguments used
4 when AIA was motivated. From the perspective of
5 someone who invests in, say, open-source software and
6 thing that do not require patent protections, it is a
7 valid view point. But from my perspective, what we
8 have done with the AIA, the changes in the Court, some
9 of which Michal quoted, we have pretty much destroyed
10 the incentives for foundational invention.

11 And what I am going to do is just tell you
12 from the trenches how this works, what it means for an
13 entrepreneur or inventor trying to invent a big
14 invention today, and I will show you some data that is
15 very, very difficult to refute showing what has
16 actually happened to big inventions.

17 And, again, I want to emphasize there are
18 many types of innovation. Innovation is a new
19 software product, maybe a change to an enterprise
20 product or a consumer website, a social network, an
21 app. Those do not really require inventions; they
22 require innovation that relies on other people's
23 inventions. Inventions change the world and
24 inventions require hundreds of millions, if not
25 billions, to invest in in many cases and we have

1 destroyed those incentives.

2 So we all know the patent system is not
3 perfect and that was cited earlier, but it has worked
4 pretty well. And I think it is very hard to argue
5 that one of the reasons the U.S. enjoys the leadership
6 we have in technology, life science and across the
7 board in many industries, materials, drugs, is because
8 we have the right for an individual or a small company
9 to own an invention to prevent others from developing
10 that invention and selling that invention. That is
11 called a property right.

12 You do not really own a piece of property
13 when someone can squat on your property without paying
14 you and the only recourse you have is to try to get
15 some rent, and if you cannot get rent, you are out of
16 luck. That is the world we live in today. This
17 patent troll narrative, which we were very cheered
18 last week when the current USPTO director started
19 debunking the myth.

20 There is something called a patent troll.
21 That is an entity that preys upon small companies and
22 using crummy patents for extortion value because they
23 charge less than the litigation value for that. That
24 type of entity has existed. It is very difficult for
25 those entities to exist today because it is true that

1 changes we have made have harmed those entities and
2 made it very difficult for them to practice. But in
3 the process, we have also washed out invention and
4 incentives for invention.

5 There are other ways to address a troll,
6 which hopefully we will get into today, and those
7 involve Federal Trade practices and policies and
8 processes and laws to go after bad behavior, not
9 inventors and not small companies that are doing
10 invention.

11 The FTC has power to influence this debate
12 and even to fix the troll problem, again, through
13 restoring the patent system for inventors and then
14 going after troll behavior. So that is why I am here.
15 I am excited to be here.

16 MS. MUNCK: Terrific. Well, thank you very
17 much.

18 And, Talal, did you want to do -- I was not
19 sure if you wanted to do your slides or --

20 MR. RALEIGH: Yes, let me go through --

21 MS. MUNCK: That is why I was pausing a
22 little bit.

23 MR. RALEIGH: So I am just going to kind of
24 skip to the chase. I have roughly six minutes left.
25 To make a foundational invention, I will just talk

1 very briefly about some of the things I have done. I
2 was the sole inventor of something called MIMO
3 technology that changed 100 years of radio science,
4 and that is used in pretty much all of your wireless
5 devices today. I did that research at Stanford. We
6 started a company. We showed that it worked. That
7 company was acquired.

8 I did a second company which developed the
9 Wi-Fi technology that is in pretty much every computer
10 and every smartphone today. These things take
11 hundreds of millions of dollars to develop and
12 anywhere from seven to ten years to reach
13 profitability. In order for a venture capitalist to
14 get a payback on that kind of investment, the
15 valuations need to be upwards of a billion dollars.

16 So when a large dominant competitor copies
17 your invention and puts you out of business, we cannot
18 hope to compete with the market power, the pricing
19 power, the engineering resources that dominant
20 competitors have. When they put you out of business,
21 the patents are there as a recourse. They used to be
22 there as a way to prevent the competitor from putting
23 you out of business because you own the property, but
24 nowadays, it is more about trying to get a fair price
25 for the investment that you have spent.

1 We have talked about the eBay decision which
2 took away the right to injunctions. So there is
3 really -- and the latest example of this is just, I
4 believe today, Qualcomm, in their dispute with Apple
5 showed the ITC that Apple was infringing on Qualcomm
6 patents that were legitimate and the ITC said, we are
7 not going to give you an injunction. So even in a
8 large company whose livelihood depends on intellectual
9 property, we are no longer providing injunction, which
10 means there is not a property right, there is a right
11 to try to charge rent.

12 So damage awards have also been dramatically
13 reduced by roughly a factor of ten over, say, the last
14 8 to 12 years. So this is just one example. If you
15 look at, say, Apple, Google, Microsoft, and Samsung in
16 the tech industry, so of the world's most important
17 and powerful dominant competitors, there is roughly a
18 thousand cases that were brought against them post-
19 AIA, and these are litigations.

20 Of those, there were roughly ten judgments.
21 Recall that if you have a few hundred million dollars
22 into an investment, you need let's call it something
23 just shy of a billion dollars to get a good return for
24 your investors after a seven or a ten-year period. So
25 out of those thousand cases, ten resulted in jury

1 verdicts that were awarded that were more than \$100
2 million and none of those had been paid. The latest
3 failure was WARF University and a seven-year lawsuit
4 with Apple. And what happens is the Federal Circuit
5 has overturned. So these dominant competitors have
6 become very, very good at a combination of serial IPRs
7 or they may file up to ten IPRs against a single
8 patent to challenge the patent again and again and
9 again. When the jury award comes down, they appeal,
10 and then they do a new wave of IPRs.

11 This is an impossible gauntlet for an
12 inventor, for a small company. And so as a result, we
13 have begun to understand this in the venture world and
14 it is influencing the type of investments we are
15 making. There is a lot more investment going toward
16 the type of companies that do software innovation,
17 consumer apps, consumer apparel, social networks,
18 things that do not really require patent protections
19 because they are innovations as opposed to invention.
20 And we are going away from things like wireless,
21 semiconductor, core networking, drug discovery. These
22 are things that as a percentage of venture capital
23 have declined very dramatically over, say, the last 12
24 years.

25 So this chart shows -- actually, this is

1 just U.S. semiconductors as an example. The reason we
2 picked this, everything in the world today rides on
3 semiconductors. Whether it is our consumer apps,
4 whether it is a computer program to use artificial
5 intelligence to discover the next drug or whether it
6 is a fighter jet, semiconductor technology is
7 underneath everything. And we are no longer investing
8 in semiconductor technology because there are dominant
9 competitors who are assured to copy the invention and
10 we cannot really invest.

11 So what can we do? I agree that there were
12 actors, some call trolls what I just call bad actors,
13 who have patents for extortion value. The way to
14 address those types of actors is by identifying
15 behavior, and when you find them preying on small
16 companies and not ever really going to litigation and
17 you can identify the characteristics of their
18 behavior, then we should use trade law to go after
19 them and prosecute them.

20 At the same time, we should really restore
21 injunction. We should have the right to own our
22 inventions and we should not look at a giant jury
23 award, what we consider to be giant, say, a \$500
24 million jury award as a problem when there is a
25 foundational invention involved in that decision. And

1 that will help start to restore things.

2 There are other things we need to do at the
3 USPTO. We need to end serial IPR abuse, this endless
4 stream of arbitrary arguments to attack the validity
5 of a patent. Another example, Qualcomm, Apple teamed
6 up with Intel, filed 42 IPRs against roughly half a
7 dozen patents together. So we need to end that
8 behavior and we also need to end the behavior of
9 arbitrary invalidity arguments where you take two,
10 three, four pieces of prior art, mix and match them
11 and, you know, an arbitrary combination of arguments,
12 again, with serial IPR trying to destroy patents. So
13 those are some of the things we can do to restore U.S.
14 invention.

15 MS. MUNCK: Okay. Well, I know you have
16 raised a number of issues that the other panelists are
17 going to want to address, but before we do that, I
18 think I would like to turn to Talal for your opening
19 statement.

20 MR. SHAMOON: Thank you. So I am sort of
21 the poster child for a lot of this type of stuff. So
22 a little bit of story time. I run a company in
23 Silicon Valley called Intertrust, which has been
24 around for about 28 years. The company was founded by
25 a guy called Victor Shear, who is sort of the classic

1 genius visionary entrepreneur, who in the '80s
2 realized that computer systems were built in a way
3 where security was assumed to come from the outside
4 and, you know, people used to lock machines in a room
5 and just rely on physical security to protect both the
6 data and the code that was running on the machine.

7 And the founder of my company realized that
8 when a computer became a PC and a PC became a cell
9 phone and a cell phone became a light bulb and it was
10 all effectively a company and these things were
11 talking to each other over open networks, like the
12 internet, you could not rely on locking the machine in
13 the room. The other thing he realized was that people
14 would use these things in very difficult contexts and
15 it was not really clear who the "enemy" was. The
16 military model of computing had basically broken in
17 transition.

18 So we ended up inventing a new way of
19 writing operating systems where the data and the
20 software in the operating system would be run in a
21 protected environment, so regardless of where the
22 machine was and regardless of where the information
23 went, it was always not only protected but governed.
24 You know, so you could always trust the computations
25 as they traveled through the world.

1 Cool idea. Founded the company in 1990.
2 Had some pretty interesting character traits. One was
3 sort of an understanding that if you came up with
4 something tremendously disruptive, at some point, a
5 large company would show up and break your toys. And
6 what Victor did was look around for the best way to
7 protect his inventions which, of course, was to file a
8 bunch of patents. He ended up from 1990 to 1995
9 filing one of the largest patent portfolios in the
10 area and developing a patent portfolio that for our
11 field was on par with what Graham Bell did for the
12 telephone or what Edison did for lighting and whatever
13 else Edison did, and then started fund-raising and
14 building a good old-fashioned Silicon Valley company.

15 I joined -- I used to be a research
16 scientist. I used to work at a lab in Princeton that
17 was funded by the Japanese company, NEC. It was a
18 basic research lab. One day somebody left the cage
19 door open and I decided to move to Silicon Valley and
20 become an entrepreneur and signed up with Victor in
21 1997, along with a bunch of other folks who were sort
22 of leaving mainstream research and engineering, and
23 actually we employ a lot of our lawyers because of our
24 commitment to intellectual property, and, you know, we
25 ended up looking for ways to apply the inventions.

1 I turned out the music industry, another
2 intellectual property industry, was being gutted by
3 the internet and MP3. We ended up developing what is
4 now known as digital rights management, which is a
5 derivative of our inventions and doing deals in the
6 music business and helping start what everybody today
7 does for entertainment, which is digital rights
8 managed music on the internet. We did deals with the
9 record labels. We went public.

10 And whether it was a self-fulfilling
11 prophecy or not, a small company from Seattle called
12 Microsoft showed up and said, hey, we would like to do
13 a deal, and back and forth, back and forth. The terms
14 of the deal were just unacceptable to us because they
15 involved Microsoft getting a license to all of our IP,
16 whether or not they actually used the products we were
17 making. We said no and thus started a -- well, what
18 turned into a huge patent war. Microsoft we believed
19 and asserted in court eventually that Microsoft copied
20 everything we did, did not take a license.

21 We started to go bankrupt. We were public
22 on the NASDAQ. We went public in '99 with 500 people
23 and just decided we were going to go back and use the
24 patents for what they were made for and we sued them
25 for patent infringement. We were called all sorts of

1 names. We had to lay off 90 percent of the company.
2 We lived in the forest, ate squirrels and fought a
3 guerilla war against the largest monopoly on earth at
4 the time, and ended up going private.

5 We became a JV of Sony and Phillips, two
6 companies that have a very strong commitment to
7 intellectual property and standards in 2003. In 2004,
8 right after a very good Markman ruling in our favor,
9 we ended up settling with Microsoft after a long
10 negotiation for the sum of \$440 million, which is one
11 of the largest settlements of its type in the world.

12 I became CEO at that point, about a year --
13 when we went private, and at that point, I started to
14 rebuild the company in the image of a Qualcomm or a
15 Dolby. I mean, we always had a very strong commitment
16 to intellectual property, research. Today, we are
17 about 250 people. We employ a Turing prize winner
18 as our chief scientist. We have an actual research
19 lab and we are fantastic innovators. We make products
20 and we also do a lot of licensing. The last 15 years
21 has been an intriguing ride.

22 Now, in the process, we also set up a
23 strategic venture fund in the company and we have been
24 dealing with all sorts of issues not only related to
25 security and management of entertainment and media,

1 but the security and management of distributed data
2 sets across the internet. So, today, we are very
3 active not only in the entertainment space, but also
4 in the energy space, we have a lot of data management
5 activities, and automotive and so on.

6 Now, in the process of being strategic
7 investors -- and this goes to a point that Michal made
8 about trolls -- we invested in a whole bunch of
9 companies, one of which was a -- at least at the time
10 was a small thermostat company called Nest Labs, which
11 is now owned by Google. And Nest, in fact, started in
12 a borrowed conference room in my building. And we
13 were part of the early stage funding rounds with
14 Google and with Kleiner Perkins.

15 And I remember the first time I saw a Nest
16 thermostat I told the founder, I think Honeywell is
17 going to be upset about this. And it took about five
18 or six weeks after the launch and I got a phone call
19 at 7:00 in the morning from Tony Fadell that founded
20 Nest Labs going, they did it. I said, what did they
21 do? And he said, they sued me for patent
22 infringement. So I was like, you know, do not talk to
23 anyone, we will be there, I am going back to bed.

24 And what Honeywell did was kind of
25 interesting, they obviously are not a troll under any

1 definition of troll, but what they did was they sued
2 Nest with a bunch of patents with the sole intention
3 of bankrupting them. And Nest fought back. They were
4 well funded. They did not have issued patents of
5 their own, but between us and Google, we kind of
6 helped out. They prevailed. They were acquired by
7 Google a few years later for \$3.2 billion, which was
8 not only a good exit for us, but a great outcome for
9 everybody, and Google acquired a great team and a
10 great product.

11 But in the process what we learned was that
12 in addition to patent trolls and everything that is
13 going on -- and we will bicker over some of the
14 details in the last two presentations. I have some
15 opinions that agree and disagree with some of the
16 comments that were made. There is a form of -- it is
17 not NPE activity, but it is a different form of
18 trolling where large companies will attack innovators
19 with intellectual property in a frivolous way with the
20 intention of bankrupting the company. If you do not
21 have patents to countersue with, you do not have the
22 funds to fight a company like Honeywell, and other bid
23 companies do this all the time.

24 I think everybody here remembers the
25 IBM/Amazon shopping cart lawsuit in the mid-'90s. You

1 go out of business, you run out of money, or your
2 investors flee. And I know I am running out of time,
3 so I will end with this. What we ended up doing years
4 later was partnering with Google to create a program
5 called Patent Shield, which we run today, where we run
6 it like a venture activity, but we go to innovative
7 startups and we provide them with a portfolio -- I
8 think it is about a thousand patents right now -- that
9 they can draw from in the event that they are sued by
10 a product company so they can countersue.

11 And it is our own contribution for carving
12 out a little bit of defensive perimeter around
13 innovative small companies so they can actually go out
14 there and innovate without the fear of being attacked
15 by larger companies that they are disrupting. Now, if
16 one of our startups or if a startup was actually
17 infringing somebody's patents legitimately or if they
18 were actually pilfering somebody's intellectual
19 property, by all means, they deserve to go down in
20 court.

21 But our intention is to find innovative
22 companies and provide a defensive mechanism for them
23 that really protects them from what happened with Nest
24 and Honeywell, and we see this all over the place. We
25 started the program about a year and some change ago.

1 We have about three or four startups in it today. We
2 have three or four more coming in. And it is a really
3 neat way to interface with innovative startups and
4 actually help them develop their own patent positions
5 in addition to providing this defensive capability
6 that will not only help them defend themselves, but it
7 will also keep their own patents clean so that they
8 can continue to build on their patents.

9 So with that, I will hand over the last ten
10 milliseconds of my time to Suzanne and we can discuss.

11 MS. MUNCK: Well, thank you very much.

12 We have touched on a number of issues that I
13 want to explore on the panel. I think before we talk
14 about some of the policy points, for me and I think
15 for the audience, it is helpful to know that each of
16 you are sort of involved, I think, in different stages
17 and with different sectors. And so when you think
18 about all of the issues that were raised in the
19 opening, how do you evaluate the IP position of a
20 company that you are either advising or considering
21 investing in?

22 And I know that at the beginning of this
23 panel we talked a lot about patents, but earlier in
24 the day we talked about trade secrets; later in the
25 day, we are going to be talking about copyrights. So

1 from just sort of a personal business experience, what
2 do you do when you sit down with a company and you are
3 either advising them or you are looking at investing
4 in the company? And I think we can just go down the
5 line this way if that works.

6 MS. MORRIS: Sure. So for the early stage
7 companies or entrepreneurs that have an opportunity to
8 interface with, the first question I actually start
9 with is more on the novelty perspective. So I start
10 with, what problem are you solving? Presumably, all
11 of the speakers talked about enforceability of
12 patents. So presumably, the patent is being filed to
13 protect some commercial product. So I start with a
14 conversation on what problem are you solving, how does
15 your technology solution solve this problem, and what
16 are the current modes for -- how are people currently
17 dealing with this issue. So that is your competitive
18 market right there.

19 So I try to get an understanding of where
20 they sit in the competitive landscape to really answer
21 the question whether a patent filing is worthwhile.
22 So in order to sort of get to that answer, we start
23 with these sort of derivative questions. And then in
24 exploring whether a patent filing is worthwhile, you
25 look at other areas of intellectual property. So

1 trade secret is not a useful tool in the academic
2 setting because it is counterintuitive. Academics
3 need to publish. Trade secret, it needs to be secret.
4 So they are in constant conflict.

5 But in the commercial marketplace, it is a
6 very viable solution to have a trade secret strategy
7 in conjunction with the patent-filing strategy. So if
8 that is an opportunity for the particular entity, I
9 definitely explore that with them as well. Trade
10 secret protection requires a lot more rigor and
11 discipline. So it is not usually useful for a startup
12 because in an early stage company, you would need
13 help. There are very few early stage opportunities
14 that are completely contained, self-contained, and can
15 grow with the two or three founders that started it.

16 You do not see Microsoft very often anymore,
17 you do not see Facebook very often anymore. So there
18 needs to be some circle of trust within that. So
19 patent filing is the other side of the protection that
20 they can then go out and talk to potential suppliers
21 and folks in the supply chain.

22 And then the third piece, which we are going
23 to get to this afternoon, is copyright protection. So
24 that is definitely an option. It is unique in that
25 there is some interesting stuff happening in the world

1 of copyrights. So I am curious to see what our folks
2 this afternoon have to say about that. But most
3 people look to patents as a real -- sort of the 800-
4 pound gorilla of IP for protection and enforcement.
5 So we start there and then we look at other strategies
6 based on the technology.

7 MS. MUNCK: And I just have a followup.
8 When you are looking at mapping trade secret
9 protection and patent protection, for example, how
10 does that go to either your valuation of the company
11 or your expectations for business projections for the
12 company first? And then, second, how do you decide
13 which rights to protect? If it is a company that is
14 eligible for trade secret protection, how do you
15 decide which rights to protect through trade secret
16 and which do you protect through patents?

17 MS. MORRIS: Sure. So from the valuation
18 perspective, it really depends on the commercial
19 product. So my time at Coke taught me how trade
20 secrets can truly, truly be an asset and truly be
21 valued and have a valuation that is quite incredible.
22 But you do not see that until time. So time is your
23 determination of how really valuable your trade secret
24 is.

25 WD-40 is another good one. There are lots

1 of interesting trade secrets that have maintained
2 their secret status. It is really hard to determine
3 that up-front on early stage tech. So the trade
4 secret benefit that truly comes out is know-how, know-
5 how knowledge, what I call negative know-how, so you
6 know how things fail. We have all had some time in a
7 lab, so we understand sort of your laboratory
8 experiments disclose for you certain things that you
9 may not want to put in a patent filing. So that level
10 of process, step, know-how knowledge is perfect for a
11 trade secret strategy.

12 Then on the patent side, you are able to see
13 that directly correlate to your commercial product.
14 So your commercially viable features should be
15 represented in your patent claim. So some of my
16 critique of Greg's remarks -- and, Greg, you are a
17 great person, but I do have some critiques on your
18 remarks -- when you look at some of the patent damages
19 and some of the case law jurisprudence that we have
20 seen over time, the reason that damages are going
21 down, we sort of finally got it, that you do not get
22 to claim, you know, a billion dollars' worth of lost
23 sales when the patented feature was really a \$3 chip.

24 So prior to some of the recent changes in
25 law, you would just say the total sale of the product

1 is really what drove the demand and that is how I get
2 my damages. Well, actually, the patented feature that
3 your rights are directly related to in the damages
4 case is related to the \$3 part. So you only get the
5 equivalent amount of damages related to that unit. So
6 the law has changed to account for what is really,
7 truly valuable.

8 And I am not an economist. We had some
9 really talented folks early today. But, to me, that
10 works with what you want from an economic market
11 interaction with IP. So I like the outcome and I
12 understand how we got there. And, now, that we are
13 there, we are smarter about what we think about when
14 we start the filing up-front, and we want to protect
15 the features in the patent claim that really directly
16 relate to commercial viability in the market, what
17 they want.

18 So that is part of the -- back to the trade
19 secret patent strategy perspective. You are able to
20 see that value in your patent if you can sort of
21 protect those features up-front.

22 MS. MUNCK: Thank you.

23 And, Michal, sort of the same question. How
24 are you evaluating the IP position? Because I do want
25 to begin to tease out some of the different views I

1 know that the panelists share with respect to the role
2 of intellectual property and sort of anchor that in
3 what you are looking at when you are evaluating
4 companies.

5 MS. ROSENN: Yes, absolutely. I think,
6 similarly to Nicole, the novelty of a company is
7 really the touchstone when we at Expa are evaluating a
8 company or I think any venture capital fund is
9 evaluating a company. How, as Nicole was saying, are
10 you addressing a problem? What is the problem you are
11 addressing and how are you differentiating yourself
12 from the competitive landscape?

13 What I would say is that filing a patent is
14 rarely part of that initial evaluation for us. It is
15 simply the case that in the environment in which we
16 are working and in the industries in which we are
17 working, the pace at which companies are innovating on
18 a particular problem and are competing against one
19 another just far exceeds the pace of filing for a
20 patent and going through that system.

21 And so, you know, when advising a company
22 that is very early stage, that is coming to us, we
23 start to think about trademark protection and about
24 patent protection as tools along the way. But rarely
25 -- in my experience -- and admittedly, hardware is not

1 an area that we focus on and I can absolutely see that
2 venture capitalists who are focusing on those areas
3 might have different perspectives here -- in the
4 software field and the internet technology field, the
5 patent portfolio and trademark portfolio is a way for,
6 as a company to develop, for it to build value to
7 attract further capital to begin to differentiate
8 itself once it has established itself, once it has
9 gotten early stage funding.

10 But, again, the primary thing that we are
11 looking at is a company's ability to outpace
12 competitors and to stay ahead of the curve, and patent
13 filing is not a major part of that evaluation for us.

14 MS. MUNCK: Thank you.

15 And I think Greg sort of --

16 MR. RALEIGH: Yeah. So this is actually a
17 very complex question and there is not a single
18 answer. So we invest in a lot of companies like
19 Michal invests in, and in that case, patents are not
20 all that important. So if you are doing a consumer
21 app, some twist on a social network, a new enterprise
22 piece of software, you might be relying on open source
23 where patents are largely unavailable. That does not
24 mean you do not have value. And there you are relying
25 on just time to market, excellence in the product, and

1 a lot less money invested to get the product out.

2 Generally, you do not invest hundreds of
3 millions of dollars in a company like that until the
4 product is proven, you show product market fit, and
5 then you are investing not in an invention, but in
6 marketing the product, a sales force, a worldwide
7 marketing program, et cetera.

8 We still want to see a patent portfolio
9 typically for good practice and just in case the
10 patent system someday recovers, as we are hoping it
11 will in the next few years, so that there is some
12 value, and if nothing else, for cross-licensing value.

13 But, now, shift gears if you are talking
14 about a new drug, a new medical device, a new way to
15 do wireless. You know, we have seen some really
16 interesting things for 5G lately. And it has become
17 much more difficult to justify those investments and
18 that is across the board in the venture community. So
19 what you are hearing is different perspectives on the
20 same set of problems.

21 We do see everything, so we change our
22 policies based on what we see. Nowadays, trade
23 secrets -- so if you reverse the clock 15 years ago,
24 trade secrets and patents were a choice. Now, you
25 really have to rely on trying to go fast and keeping

1 everything secret. In my career, I have done three
2 big inventions that, you know, really changed the
3 market in wireless. All three of those were copied
4 very quickly by dominant competitors. So it is a 100
5 percent they will get copied.

6 So you can try to keep them underground as
7 long as possible with a trade secret, but that is not
8 the same as a patent because you are eventually going
9 to get copied. And they have literally a thousand
10 times the resources to put on the development than you
11 do, they have market power, they own the customers,
12 they control the debate as they have in the patent
13 world. So it is very, very difficult without patent
14 nowadays to justify certain investments.

15 I would like to just comment on a couple of
16 other things. We see demand letters quite a bit. But
17 we do not -- I mean, generally, I have never seen a
18 demand letter in the early stage. And after we had
19 the pre-call, Michal mentioned she has seen demand
20 letters when companies first get off the ground, and I
21 said, I have never seen that. So I asked several of
22 my colleagues in the venture world. And I said, have
23 you ever seen a demand letter at that point and none
24 of us have, at least the people I have talked to in a
25 quick canvass.

1 Where we see them is when a big success
2 begins to become evident. So that is where maybe you
3 are going to go public. You are a unicorn. You know,
4 you are worth a billion dollars. Maybe you just
5 raised \$50 million in a fund-raise. That is generally
6 where we see these things. And you are a little more
7 sturdy at that point.

8 And I will tell you who does not need
9 protection against demand letters is the giant
10 companies pushing the narrative in the patent world.
11 Okay? When it is small versus big, that is a very
12 different scenario than whether it is a bad actor or a
13 large company attacking a small company. What we have
14 done, in general, is made it so expensive and so time-
15 consuming to try to defend a patent, you are talking
16 seven years, appeals, dozens of IPRs. There is no end
17 to the process. And maybe it is a \$30 million process
18 over that time. That is an impossible gauntlet for a
19 small company.

20 So you might say, okay, I am going to do a
21 trade secret and try to escape, you know, first orbit
22 and get into the -- you know, make it with the company
23 without those protections. Sometimes you can invest
24 in that, but that is a much riskier scenario than if
25 you can own the product of your investment.

1 One of the things -- there is this idea that
2 you should get a royalty on a chip that costs a dollar
3 versus, say, a phone that costs \$1,000. This is
4 called the minimum saleable unit. What it does is it
5 motivates the manufacturer of the phone to try to
6 crowd your intellectual property down into something
7 they can say costs a dollar. And the best way to
8 evaluate the value of an invention is to say, what
9 would happen to that product without the invention?
10 What would the market value be without that invention
11 regardless of where it goes in the product?

12 MS. MUNCK: So we keep getting into a lot
13 more interesting questions and much more interesting
14 questions than the ones that I have written down. But
15 I want to give Talal a chance to answer this question,
16 sort of how do you evaluate the IP position. And
17 then, Nicole, I know that you have a question.

18 MR. SHAMOON: People have hit a lot of the
19 points. I will focus on entrepreneur psychology and
20 how we evaluate. I mean, I have a bunch of trick
21 questions that I ask in a pitch just to make it go
22 quickly, one of which is why are you different. The
23 other is, if you are successful, how do you prevent
24 somebody from, like, knocking off your product. And
25 there is a basket of tactics that companies employ.

1 One is just to run faster than the other people, build
2 up enough of a base that somebody is going to want to
3 buy you for your market accomplishments. And there is
4 not a one-size-fits-all strategy.

5 I have never really met a successful company
6 that is going to purely rely on trade secrets. Trade
7 secrets -- I am advising -- it is actually an Israeli
8 company spinning out of Tel Aviv University in the
9 agriculture tech space, a very patent-rich area. They
10 are coming out with a really good patent portfolio.
11 They genetically engineer plants to complain louder
12 when they are sick than when they are not sick, and
13 then they have nanosensors that detect that the plant
14 is sick. It is a very cool idea. They are going to
15 depend on their patents to go up against the Monsantos
16 of the world. At the same time, the techniques for
17 genetically engineering a plant are going to be trade
18 secrets.

19 Now, the woman who is running the company is
20 brilliant, but she does not have a lick of
21 intellectual property expertise. In that situation,
22 we have been advising her on how to create an entire
23 intellectual property strategy. And there is always a
24 way to fit an intellectual property strategy to any
25 technology venture. Now, it may be you are in social

1 network, you are in the data space, and you are using
2 a bunch of open source tools. So, by definition, most
3 of what you are going to do is going to be open source
4 anyway. That is an intellectual property strategy.
5 You know, you are using sort of the ice-nine of the
6 open source system to basically defend yourself by not
7 having any defenses. A lot of people do not know how
8 to play that instrument very well and they need to
9 develop an IP strategy themselves.

10 The last point I would make is we have
11 talked a lot about, you know, light bulb, patent, go
12 to market. But on the internet, a lot of the stuff
13 that is being done is in the AI and the data space.
14 And I do not know if you went to that panel at the
15 conference we attended in Sweden, but there was an
16 attorney from Microsoft who brought up a really
17 interesting set of issues about there not being any
18 really good intellectual property mechanisms to
19 actually protect data. Data falls between the cracks
20 of copyright, patents, trade secret. And there are
21 all sorts of cases where, you know, like can you
22 copyright a phonebook, can you use the data in a
23 phonebook even though it is copyrighted, stuff like
24 that.

25 If you look at the largest companies in the

1 world today, Google, Facebook, Netflix, Amazon. They
2 are all data-driven. And, you know, Google goes to
3 extreme lengths to protect the trade secrets that
4 allow them to analyze the data for their profit.
5 Facebook does a lot of that themselves. But if you
6 have a large data set you have accumulated through a
7 bunch of algorithms you have developed, you probably
8 cannot patent the algorithms because you have used a
9 bunch of open source tools to develop them and then
10 you fall into all of the oddities around software
11 patents.

12 Your data is your intellectual property.
13 But there is no clean way of going after people who
14 grab it or make inferences on it, and that becomes a
15 really tricky differentiator as well. And all of the
16 problems we are talking about with the patent systems
17 have to do with the fact that by definition -- and we
18 want it to work this way -- the law lags innovation.
19 And there is always this undercompensation/
20 overcompensation effect.

21 The whole PTAB IPR thing is literally a hack
22 on a system because people could not wait long enough
23 for the law to adapt. So we have done a bizarro
24 retrofit that has done a really good job of tamping
25 down NPEs, but has taken a lot of -- you know, there

1 is a lot of crossfire and a lot of collateral damage
2 in the process.

3 But the system will eventually catch up and
4 clean its act up. And I agree with Greg. I think the
5 FTC can do a lot to sort of come in on the perimeter
6 of what the PTO is doing and sort of help the system
7 act more rationally until the rest of patent law sort
8 of comes into play.

9 I will give the floor back to you, Suzanne,
10 but one thing I think we might want to address is
11 actually the context of American innovation operating
12 in a much more globalized world where people who never
13 used to file patents and deal with IP systems like
14 China are actually becoming more assertive and more
15 aggressive than we are and innovating in their own odd
16 way. There is actually a global trade aspect to what
17 we are discussing. I hope we can come back to it in
18 the context of some of the questions that come down
19 the pike.

20 MS. MUNCK: I think that is an interesting
21 point.

22 Nicole, I know that you had a question that
23 you --

24 MS. MORRIS: Yeah, I know the panel has kind
25 of taken a life of its own. So if it feels like we

1 are sort of scrambling, it is only because there are
2 lots of interesting issues that are coming out of our
3 comments.

4 I wanted to go back to something Greg said.
5 I think it is a little bit more complex. I actually
6 want to learn a little bit more about how you guys
7 deal with these investment decisions. So you have
8 mentioned that the pharma and medical device, they are
9 just not as attractive as business investments. But
10 my question points to -- it is really what stage are
11 you looking at pharma and medical device and is it
12 really because it is a patent problem or is it the
13 regulatory issues and the uncertainty in terms of
14 toxicology data and the uncertainty in terms of
15 efficacy for those particular industry sectors that
16 make that a less attractive or more difficult
17 investment? So can you tell us --

18 MR. RALEIGH: That is actually a great
19 question. So there is no doubt that in addition to
20 intellectual property, et cetera, in life sciences,
21 regulatory is massive. And regulatory goes through
22 phases where it can be easier or harder to get
23 approval for something and that greatly influences the
24 outcome of the investment because it stretches out the
25 time and increases the risk. When it is harder, it

1 makes it better.

2 What I was saying is that -- here is an
3 example. Let's say you develop a fantastic medical
4 device. And let me just say this, these new
5 techniques, there is actually a paper by U.S.
6 Inventors for Jobs that you should all read that is
7 coming our shortly that I just saw on serial IPR abuse
8 in the patent system. This is where a giant dominant
9 competitor can file as many IPRs as they want until
10 the patent is dead, and it is extremely effective.

11 And so what has happened is the dominant
12 competitors practiced on small companies first,
13 perfected their art of destroying patents over periods
14 of time, and now they are going after some of the most
15 important intellectual property producers in our
16 economy. Genentech and life sciences is now -- it is
17 no longer about the troll patent. These techniques
18 are so good at killing patents that the most valuable
19 patents in life science are now being attacked, the
20 most valuable, Qualcomm, the most valuable in the
21 world for wireless are being attacked.

22 And so when you face that kind of
23 environment and you are building, say, a medical
24 device, you have to say can we keep it under wraps
25 long enough to get out there? And when is that

1 disease that has happened starting in the tech world
2 with the dominant competitors going to come to my
3 industry? And, now, we see it migrating from tech
4 into some segments of the medical industry. So the
5 disease has to be stopped and reversed so that great
6 patents, wonderful inventions can be rewarded.

7 So no question in life sciences, the other
8 regulatory factors are at least as big. But still if
9 you cannot protect -- for example, when you could have
10 an injunction for 15 years, you knew for 15 years that
11 medical device was yours to produce. Nowadays, it is,
12 okay, how long can I stay ahead? Once it becomes a
13 big market, someone is going to put 100 times the
14 resources you are able to put, so maybe it is seven
15 years or six years, and then that factors into the
16 investment pieces, and so then that degrades the
17 valuation, which degrades the amount of money you can
18 invest, which may prevent that from coming to market.

19 MS. MORRIS: A couple of rebuttals. One,
20 serial IPRs are really hard to do. So let's drill
21 down a little bit on IPRs. So from a startup
22 perspective, there are very few startups that have
23 more than five patents. It is hard. It is almost
24 impossible.

25 So serial IPRs are difficult to do because

1 there is an estoppel provision within the USPTO that
2 says if you bring all of your claims -- or you need
3 to, at least in your initial filing, bring all the
4 claims that you reasonably could have filed at this
5 time. So there are some protections within the system
6 to stop that. But I am not saying that people have
7 figured out a way to game it. But it is not gameable
8 as easy as some of your remarks tipped the scale
9 towards a little bit in my opinion.

10 And then the other part, as far as -- oh,
11 gosh, there are so many things that you said that are
12 rich. Oh, I lost my train of thought on the second
13 part. But the serial IPRs, I wanted to at least --

14 MR. RALEIGH: I hate to -- hopefully, this
15 is not too wonky, but this is super-critical. This is
16 just one example of the abuse that is occurring. So I
17 kind of feel like you just lobbed me a softball, so
18 thank you.

19 MS. MORRIS: No, that is okay. Keep it
20 coming.

21 MR. RALEIGH: So this paper that will be
22 coming out -- and I think it is coming out within a
23 week -- it actually is similar to a paper that came
24 out in IP Law a couple weeks ago -- shows how the
25 dominant competitors, especially in tech, are

1 completely subverting the intention of the AIA and
2 filing up to a dozen IPRs against a single patent.
3 And they will also practice something -- if it is a
4 small company they are going up against, they will
5 practice something called portfolio abuse where
6 they --

7 MS. MORRIS: Are these being instituted or
8 are they just being filed?

9 MR. RALEIGH: Many are, yeah, eventually.
10 Here is the thing with IPR, if you can keep filing,
11 there is a gambling effect. So you are dealing with
12 human judgment on these panels. Some patent judges in
13 the panels are more favorable than others. And
14 eventually you get a panel where two of the three are
15 favorable to one of your arguments, one of the, you
16 know, two, four, six, 12 arguments you have been able
17 to make and you have been allowed to make. And they
18 are very similar arguments involving combinations of
19 art that are often arbitrary.

20 This is happening and there is data on it.
21 It is being published. This is a fact. And it is
22 something that has to be fixed. And it is one of the
23 most deadly things happening to inventors right now
24 that is out there. That, in combination with
25 arbitrary assemblances of prior art references, take

1 two, three, four prior art references, mix and match
2 them, and five different arguments until somebody
3 says, hey, you know, I think that is right, and then
4 you lose the patent.

5 MR. SHAMOON: I think you are protesting too
6 much. I mean, I agree with you, the system is
7 overcompensating. But Apple versus Qualcomm is a bad
8 example. That is called a negotiation where I come
9 from. You have two IP giants and Apple is not exactly
10 an angel. They sued the crap out of the entire mobile
11 space and they know how to stand behind their patents
12 trying to figure out a cheap deal on chipsets and they
13 are going to the court for that.

14 In terms of IPRs being used -- big companies
15 hitting little companies and things like that, this is
16 a technique that is available -- and far be it in my
17 role to defend the way big companies defend
18 themselves, but it is a technique that is available to
19 them. And if they are sued, they are going to fight
20 back with whatever is at their disposal. Fifteen or
21 20 years ago, there were no IPRs available and what
22 would happen is you would sue Mr. Big in San Francisco
23 and Mr. Big would countersue you in Australia because
24 it was like really expensive for Joe Startup to go to
25 Sydney to defend himself.

1 So there is -- the minute you are in court,
2 it is a war. Both sides are going to use every tool
3 at their disposal. We now have a tool that is being
4 overused and it -- you know, as I said, the system
5 will compensate back. But you are picking on these
6 anomalies to amplify the problem and, you know, to me,
7 it does not seem that bad.

8 MR. RALEIGH: Yeah. So if I can just
9 completely disagree. So, again, please read the
10 paper. There are tons of examples of small companies,
11 WARF is an example, which --

12 MS. MORRIS: WARF is not a small company, by
13 the way. It is a university in Wisconsin.

14 MR. SHAMOON: I mean, you get people like
15 the regents of --

16 MS. MUNCK: So, you know, I am going to jump
17 in here because I think that we can --

18 MR. RALEIGH: What is that?

19 MS. MORRIS: WARF is not a small company.
20 It is the University of Wisconsin.

21 MR. RALEIGH: No, I said it was a
22 university.

23 MS. MORRIS: Yeah, yeah, yeah. But they
24 have several patent victories. So the reason they can
25 fight for seven years is they are quite successful.

1 MR. SHAMOON: The endowments of these
2 universities are bigger than the market cap of a lot
3 of companies.

4 MR. RALEIGH: So we are -- look, here is a
5 question.

6 MS. MORRIS: But I know we are getting
7 adversarial --

8 MS. MUNCK: No, no, I just -- the reason
9 I -- the adversarial part is fine. I have no problem
10 with that. But it is more about honestly listening to
11 this transcript and thinking about how I am going to
12 use it in a report. So I am very grateful to have you
13 guys talk about these issues, but I think one thing
14 that is interesting to me is, you know, the FTC has
15 weighed in on a lot of these issues. We have not
16 really weighed in on the PTAB issues very much. And,
17 tomorrow, if I can make a pitch for tomorrow as I said
18 this morning, we are going to have Patent Commissioner
19 Hirshfeld and the Acting Chief Judge of PTAB, Judge
20 Boalick. So we will be talking about some of those
21 issues.

22 But I think that -- as I said, I do not mind
23 the adversarial nature, but if we can kind of talk
24 about specific instances that have happened to you and
25 specific recommendations that you have for that issue.

1 Because, you know, we can talk about Apple and
2 Qualcomm and that is okay, but we do not have Apple
3 and Qualcomm here. So that is not -- in terms of
4 using that for my purposes in a transcript, that makes
5 it a lot more challenging.

6 So I think -- and, you know, Elizabeth and I
7 have been talking about how to sort of ask these
8 questions and I really do not want to exclude
9 Elizabeth because you have a lot of interesting
10 thoughts on this. So, I think maybe now is a time to
11 turn to some of the points in Greg's slides and as you
12 are answering these questions, you know, thinking
13 about how it has impacted you in your particular
14 industry and to the extent that you can make the most
15 specific recommendations possible.

16 So, for example, I think what we were just
17 talking about with serial IPRs, that is something that
18 would give you a chance to say, okay, are there -- you
19 know, from a research perspective, are there serial
20 IPRs happening, are they serial IPRs or is it
21 different prior art being brought against different
22 claims in the same patent? Because, to me, that is a
23 little bit different. So that is just an example of
24 what I am talking about. But I want to give Elizabeth
25 a chance.

1 MS. GILLEN: Thank you, Suzanne.

2 I just wanted to return to a point that Greg
3 made earlier in his slides that IP remedies today no
4 longer justify the risk of investment. And I would
5 like to hear thoughts from the other panelists as to
6 whether you agree with that statement and whether
7 investment decisions have adapted or changed to modify
8 that trend and, also, what factors the FTC should be
9 looking at in this discussion.

10 MR. SHAMOON: We advise all the companies we
11 invest in to build strong patent positions. And one
12 of the things that really attracted me to Nest in the
13 beginning was he had a serious commitment to building
14 an intellectual property portfolio of his own and
15 actually has some really good patents. That not only
16 goes to their ability to defend themselves, but in an
17 exit scenario, it is another brush of color that adds
18 value to an exit.

19 If you have a strong patent position and
20 everything else has failed, sometimes people will buy
21 you for the patents. If you have a strong patent
22 position and you are succeeding, that will make an
23 acquirer feel better about buying in. I think that
24 every good American entrepreneur should be building a
25 strong intellectual property strategy and we encourage

1 all the companies we invest in to do so and help them.

2 MS. ROSENN: Yeah, I would agree with that.

3 And, you know, setting back the statistic that I
4 mentioned earlier, there is the 44 percent increase in
5 R&D spending from 2012. I do not think anyone can
6 look at the current investment atmosphere and say that
7 that is declining or that venture capitalists or other
8 investors are hesitant to invest in the U.S. market.
9 I think quite the opposite.

10 And, you know, very similarly to what Talal
11 said, intellectual property is an enormous asset for a
12 company. It is a strategy that entrepreneurs need to
13 be thinking about from the earliest stages and whether
14 that comes from the development of trade secrets,
15 whether that comes from filing patents for legitimate
16 inventions that they are accomplishing along the way
17 as they build their company, whether that is building
18 a strong trademark portfolio and building a brand
19 around to that, that is something that we very
20 actively advise our companies to do.

21 There is one point I wanted to go back to
22 that I think Greg has been citing as one of the
23 obstacles that has arisen for inventors, and this is
24 the issue of injunctions. You know, I think Greg
25 is citing an eBay case from a while back. And just to

1 clarify, injunctions are still available to patent
2 holders the way that injunctions are available to any
3 other litigant in this nation.

4 It is simply -- that eBay decision simply --
5 which by the way was a unanimous decision in the
6 Supreme Court -- simply brought the field up to a
7 place of equality where patents no longer got this
8 exceptional rule of an automatic permanent injunction
9 and they simply had to prove that they were entitled
10 to a permanent injunction the same way any other
11 litigant does, by meeting the four-factor test. And
12 when they meet that test, they receive an injunction,
13 as anyone else would.

14 It simply does not -- it simply sort of
15 took the favor that was -- the exceptional favor that
16 was given to patents and treating it as though it was
17 kind of personal property and equalizing that a little
18 bit.

19 So one additional point that I would make --
20 and I would like to harken back to something Tala
21 said. I am very, very glad that you brought up the
22 point of dominant industry players using -- that it is
23 not just trolls who are engaging in troll behavior,
24 not just nonpracticing entities, but it is a very,
25 very common practice that I have seen at both

1 companies that I have been at where projects on
2 Kickstarter, as well as companies in Expa's portfolio,
3 have been targeted by dominant players in the
4 industry, bringing spurious claims, usually filing
5 dozens against dozens of defendants at the same time
6 with, you know, nonparticularized pleadings and
7 complaints, often alleging use of technology that is
8 not even used by certain of those companies.

9 So to the extent that the FTC can, you know,
10 help to further the project of getting particularized
11 pleading standards, making sure that -- well, venue, I
12 think, has been addressed by the Supreme Court to a
13 large degree. But to the extent the FTC and the USPTO
14 can continue to ensure that venue is not being abused,
15 I think these are the areas where we can see
16 improvements in the current system.

17 MS. MUNCK: I think that is a theme, correct
18 me if I am wrong, that each of you have raised. And
19 so I think that that is an interesting point. Because
20 as you were talking about that I was wondering, were
21 these sort of issues that you were seeing before the
22 abolition of Form 18 or are you still seeing them?
23 And the reason that I am asking this is tying back to
24 sort of the tools in the FTC's toolbox.

25 When we issued our PAE report, one thing we

1 saw was the potential for nuisance litigation among
2 some players and so our recommendations went to
3 litigation behavior. And it is fair to say that that
4 was criticized. And I think that is right and we take
5 that into account. But I am wondering, as you are
6 talking about what you are experiencing as investors
7 in early stage players or elsewhere, and the idea that
8 you have companies that are bringing sort of serial
9 litigation, how do you address that and is that taken
10 care of with Form 18?

11 MR. RALEIGH: What is a serial litigation?
12 Let's make sure we understand.

13 MS. MUNCK: Well, I think what I am -- and I
14 want to make sure I am not paraphrasing you in the
15 wrong way. But if you are saying that as a small
16 company or as an entry company you have some -- and as
17 I am sort of saying this, I want to make sure that I
18 am not saying it in the wrong way. So maybe I will
19 ask you that. Do you think that that is a fair
20 characterization of what you have said? And if it is,
21 what remedies would be necessary?

22 Because as I am thinking about this and as I
23 am listening to all of you, I am thinking very clearly
24 of the FTC's role in trying to make sure that we are
25 hearing everybody and balancing all of the issues.

1 MR. RALEIGH: Yes. So in general,
2 innovation and investment in small companies in the
3 U.S. is booming. I agree with Michal. What is
4 happening is where we are investing is changing. And
5 I want to take us back to that. Because it is a fact
6 that certain industry segments are underperforming in
7 the percentage of U.S. venture capital compared to
8 others as a result of the fact that our intellectual
9 property laws have changed. The data is there. So I
10 would encourage the FTC to look very deeply into that
11 and ask the question, is that the incentive we want to
12 provide?

13 Second, there are abuses on both sides. I
14 fully acknowledge this notion of a bad actor that
15 attacks small companies. But there is also another
16 kind of abuse which we have not even talked about. We
17 talked about big companies suing small companies over
18 patents, but we have not talked about big companies
19 having policies that they institute that say, do not
20 pay any attention to patents, do not look at
21 infringements, ignore until you get sued, and then go
22 scorched earth policy and IPR in litigation.

23 And so you asked us to provide real world
24 examples of personal experience and also not to talk
25 about companies. So I have personal experience twice

1 in the last eight years with companies being
2 approached for acquisition that have fantastic
3 technology. They get their brains picked for two or
4 three weeks and then the large dominant company says,
5 instead of a billion dollars, we have decided this is
6 only worth \$50 million, so if you would like to sell
7 for that, fine. Otherwise, we are going to do this
8 ourselves.

9 And then the small company says to the
10 executive, well, we have patents. And the large
11 company says, let me tell you what we do to people who
12 approached us with patents that are like you. We sue
13 you with our own patents. We take you to court. We
14 file an IPR against your entire portfolio. That is
15 called IPR abuse in a portfolio sense, not just the
16 ones you are going to come at us with, but your entire
17 portfolio. We will put you underwater there. And
18 then, you know, if you win in court, we will appeal
19 and we will keep you going for seven years. This is
20 going to be a massive expense for you and we will put
21 you out of business. I have seen those conversations
22 take place. They happen all the time.

23 MR. SHAMOON: My company is living proof
24 that if you do not take that and you fight back, you
25 win.

1 MR. RALEIGH: If you can raise the capital.
2 So then you have to go out -- I agree.

3 MR. SHAMOON: I mean, it is the point of
4 business, right?

5 MR. RALEIGH: In today's world, I am not
6 sure that is true anymore. Ten years ago, yes,
7 because I think that is in the order of the time frame
8 you have. But in today's world, you go back to your
9 venture capitalists and say, I would like \$30 million
10 to fight giant company A and that is generally not a
11 very popular investment today.

12 MS. ROSENN: Well, I would also say that IPR
13 did not introduce any new avenue for claims that did
14 not exist before. These are claims that would have
15 ordinarily been brought through litigation, which is
16 significantly more expensive for both parties. I do
17 not think that the large parties that you are talking
18 about that are using this in a weaponized way would be
19 cowed by the cost of litigation --

20 MR. RALEIGH: True. But if they --

21 MS. ROSENN: -- comparatively to IPR. So
22 IPR simply makes it more affordable and, frankly,
23 easier for the person defending the --

24 MR. RALEIGH: That is the argument. And I
25 am sorry to be the thumb that sticks out today, but

1 there is reality out there. So in court, you have one
2 bite of the apple and you get to make one argument and
3 then the court decides whether or not your argument is
4 right. The rules in IPR have been different.
5 Hopefully, they will be cleaned up, and they are
6 looking at it now. But you can make many, many
7 arguments. You can also -- there is evidence of
8 collaboration in the market where giant competitors
9 collaborate through firms like UnifiedPatents and also
10 directly. Like take for example -- I will not name
11 any names, but they collaborate with each other. And
12 you may see, like I say, a dozen IPRs. That is a
13 dozen bites at the apple, whereas in court, you have
14 one.

15 MS. MUNCK: So, Greg, if I could ask a
16 followup. When you are talking about -- because I
17 think you talked about a valuation issue and an IPR
18 issue. And what is your recommendation for addressing
19 that? Because I think, you know, the IPR sounds like
20 it is just one component.

21 MR. RALEIGH: Yeah, IPR, arbitrary
22 combinations of art, BRI, which are addressing, you
23 know, clear guidelines in Alice to make Alice more
24 predictable, and then the realization that a large
25 jury award for a very substantial invention is fair

1 and then hopefully return some kind of injunction.
2 Just to address your earlier point on injunction,
3 ITC cases -- a minority of ITC cases are found to
4 infringe. Once it is found to infringe, there is
5 an 85 percent failure rate from the time it is found
6 to infringe to injunction. So you are looking at a
7 rate --

8 MS. MUNCK: Do you mean exclusion order?

9 MS. RALEIGH: Yeah, an ITC. And a lot
10 of those injunctions are temporary. You are
11 looking -- so as an investor or as an entrepreneur,
12 you say, I have like a 95 percent chance of failure of
13 getting an injunction after I make all the arguments,
14 after my invention has been copied. You have to
15 assume that is unavailable in today's world.

16 MS. MUNCK: Okay. And I think we will -- it
17 is a good idea to go back to the data in terms of the
18 ITC issues because I do not have that at top of mind.

19 MR. RALEIGH: Right.

20 MS. MUNCK: But I think, you know, one issue
21 is always separating out the 337 standards and the
22 standards for an exclusion order, and I think, you
23 know, in the past, to be fair, the FTC has supported
24 eBay because, as a matter of our policy, we have said
25 that there should not be special rules for

1 intellectual property. And so, you know, one of the
2 things that we are doing -- and that extends in
3 several places. We say that there should not be
4 special rules for intellectual property. We say that
5 we do not have to presume that patents will give you
6 market power. That was sort of more unique in '95
7 than it is today. We say that patent licensing
8 generally is procompetitive.

9 So it is a leading question, but are you
10 sort of suggesting that we should have different rules
11 for intellectual property than we have for other
12 marketplaces as we are looking at --

13 MR. RALEIGH: So you have to ask yourself is
14 it property. Right now, it is not. So I think there
15 is also a question, which becomes extremely
16 complicated and I cannot pretend to understand how to
17 resolve it, but it is a question I think that should
18 be asked, is an injunction for a small inventive
19 company who depends on that invention to create a
20 return for the employees and the investors, is that
21 the same as an injunction for a giant competitor that
22 probably does not need the injunction to live and
23 survive and profit?

24 So I think that --

25 MS. MUNCK: I am just thinking about the

1 four eBay factors and --

2 MS. MORRIS: Yes, I have them here. The
3 patent owner must show -- we are talking about
4 injunction, so let's get to the test -- irreparable
5 harm, that money damages are inadequate, the balance
6 of hardships go in favor of the patent owner, and then
7 the public interest would support a permanent
8 injunction. So what eBay did is harmonize the law.

9 So as Michal mentioned, you know, before we
10 had sort of a special case for IP. The Supreme Court
11 said, no, no, no, we have always allowed parties to
12 argue for injunctive relief and this is the test.
13 You, in a patent case, must follow the same test.

14 Now, if you can argue and show -- and there
15 are cases in the pharma industry where it was Sanofi
16 versus somebody else -- I just looked at two of them
17 yesterday -- where they were able to prove and show
18 that there was irreparable harm and money damages
19 would be inadequate. And in the article I read about
20 it, it is usually if it is a two-player market. So
21 going back to economies of scale. So you have two
22 either small players or dominant players, it does not
23 matter, but they have the entire market. And one of
24 them is infringing on the patent and they argue for a
25 permanent injunction, that the court has granted that

1 because there was an ability for the pharma company to
2 show irreparable harm.

3 MR. RALEIGH: Yeah. So not to use specific
4 company names, but it is very timely. So just I think
5 this morning, an order came out from the ITC with the
6 Qualcomm case.

7 MS. MORRIS: That is a different standard.
8 Just to be clear that the exclusionary order standard
9 is not the same standard for a permanent injunction.

10 MR. RALEIGH: Fair enough, fair enough. We
11 are talking about exclusionary --

12 MS. MORRIS: So we do not want to conflate
13 those issues.

14 MR. RALEIGH: -- which is on the way to a
15 permanent injunction. So this is a first step.

16 MS. MUNCK: And, actually, I think this is a
17 really fascinating --

18 MR. RALEIGH: I actually have a point I
19 would like to make.

20 MS. MUNCK: Okay. I did not want to cut you
21 off. Yeah, sure.

22 MR. RALEIGH: They were not allowed
23 exclusion because preventing some other chips coming
24 to market that they felt would harm the public because
25 prices would go up. But let me just say I would ask

1 the FTC to evaluate the following question. Yeah,
2 that is a short-term price increase for a product
3 perhaps or maybe not, maybe the prices are equivalent.
4 But what is the public harm to the pressing invention
5 because you cannot own an invention anymore?

6 There is a different kind of harm that
7 occurs when you decide there is no such thing as
8 property in the word "intellectual property." So I
9 would ask you to look at that.

10 MS. ROSENN: Well, Suzanne, I actually want
11 to go back to just a word that you mentioned, which is
12 competition, right. What does a permanent injunction
13 do? It shuts down the use of a particular patent and
14 largely will shut down that company. It eliminates
15 competition. So while we are talking about the value
16 of intellectual property and how that will encourage
17 invention, we also have to be very wary of, as I
18 mentioned in my opening remarks, this balance between
19 innovation and competition.

20 And I think the kinds of standards that Greg
21 is putting forth are ones that shift the balance very
22 heavily in favor of innovation and essentially create
23 a marketplace where there can be no competition, where
24 the simple, you know, assertion of a patent
25 infringement suit can put another company out of

1 business.

2 And, you know, when I was at Kickstarter, we
3 would always talk about how we want to compete on the
4 basis of our product and to always just be sure that
5 we are able to provide the best product that is out
6 there and we want to compete against competitors, we
7 want that competition to exist. And I think,
8 unfortunately, the patent system is very frequently
9 used as a way to simply ensure that there is no
10 competition.

11 MS. MUNCK: Well, I am sure we all would
12 like to -- I actually would love to extend this panel
13 by two hours, but I do not have that authority and I
14 know that there would be very angry people if I did
15 that. So with that apology and with apologies to some
16 of the questions that we have gotten that go to your
17 question, Talal, of globalization -- I would love to
18 find a way to keep this conversation going -- I would
19 like to turn this over to you for your final
20 statements. And if we go over by a minute or two, is
21 that okay? Okay, thank you.

22 MS. MORRIS: So we talked about a lot of
23 different issues and, hopefully, you guys were able to
24 keep up. Some of the things in terms of closing
25 remarks that I think would be helpful for what you

1 need to do as you go forward, I think there is --
2 despite our critique of many comments from Greg, there
3 probably is some issue with serial IPR filing in some
4 anomaly cases.

5 So an argument could be made that that is
6 stifling competition and I think that the FTC could
7 play a role and have some work with the PTO in terms
8 of looking at some of the new -- the IPR practice and
9 maybe some of the other new practices within the
10 Patent Office and whether or not that is having a
11 negative impact on competition or a negative impact on
12 the marketplace in terms of allowing people to
13 continue to either have some business rights or
14 through their intellectual property rights, there
15 being -- there are competition sort of harms there.
16 That would be my suggestion for how to look at
17 addressing that.

18 MS. MUNCK: Thank you.

19 MS. ROSENN: Yeah, and agreeing with Nicole,
20 I actually completely agree. I think we are, at the
21 core, probably trying to get at the same thing, which
22 is a patent system that, like I said, balances these
23 interests of innovation and competition in the best
24 way possible.

25 I, by no means, think that the AIA is the

1 perfect solution, but what I would say is that it
2 is -- the IPR process, the various Supreme Court
3 decisions, are good first steps to get us there and I
4 would encourage that FTC, together with the other
5 government actors here, to continue to build on that,
6 to investigate any issues that seem to have arisen
7 with the IPR process, to talk with all of the actors
8 here, whether they are small businesses and startups
9 or inventors or, you know, pharmaceutical companies or
10 research institutions, all of them and fully
11 understanding and understanding that each is going
12 to present their side as though it is the be-all and
13 end-all, but the truth probably lies somewhere in
14 between.

15 And I think through progressive
16 improvements, we can hopefully end up at a system that
17 really draws on the different parts of the government.
18 It is really wonderful to see the FTC engage in this
19 and not just say, you know, this is the job of the
20 USPTO, but really see how we can identify each of the
21 problems that exists in the patent and intellectual
22 property system and kind of marshal resources together
23 to address them.

24 MS. MUNCK: Thank you.

25 MR. RALEIGH: So we are at the end of a 15-

1 year cycle that started with a group of lawyers at a
2 big tech company that have invented the term "patent
3 troll" because their CEO said I want another 1 percent
4 profit margin in my product and those silly royalties
5 we are paying are degrading that profit margin. And
6 after 15 years and hundreds and hundreds of millions
7 of dollars spent influencing the debate, we arrived at
8 where we are.

9 And we are now in a regime where we have
10 influenced where we are making investments. Big
11 inventions that require patent protections are far
12 harder to justify an investment in today. And that
13 flywheel is in the process of spinning down. And we
14 will recognize at some point what we have done. This
15 is not the first time in our economy this has
16 happened.

17 Just two examples, this same exact debate,
18 if you go back and look at history, happened around
19 the turn of the century, 1900, around the electric
20 motor. And the electric motor was there are too many
21 patents, there is something akin to a patent troll.
22 There is no room left for innovation, et cetera. It
23 happened again when the television set came.

24 So we go through these cycles and when we
25 punish patents, we find out later that we are not

1 investing in fundamental technology and we go through
2 cycles, as we did in the '80s, where we returned
3 invention rights and saw a boom in fundamental
4 invention. So it is the ability to own an invention
5 that allows small entities to take on giants. That is
6 gone right now for some types of invention. And I
7 hope that we can restore that.

8 And I want to just say one more thing.
9 Other countries are recognizing our history and they
10 are actually providing far greater invention
11 protections than we do now. Just two examples,
12 Germany and China, of all places. It is now easier to
13 protect an invention in some cases in China and far
14 easier in almost all cases in Germany than it is in
15 the United States. And I would just ask the FTC to
16 look at what is happening overseas, and that is the
17 one way we do -- you know, you can protect your
18 invention, but it is not in the United States; it is
19 overseas.

20 MR. SHAMOON: So I will start by saying that
21 I agree with the envelope of what Greg was saying. I
22 think a lot of the points that have happened over the
23 last few years are actually somehow impeding
24 innovation in the United States and directly harming
25 consumers -- in some cases directly harming consumers.

1 Although, you know, in terms of the specifics and how
2 things are evolving, we have a system that has really
3 been put together to patch up not only flaws in the
4 way our people are using patents against each other,
5 but also the way patents are being issued.

6 One of the issues is when you look at China
7 as a case study, they have the ability to throw
8 thousands of examiners onto the patent system to deal
9 with the increase of filing and ownership of
10 intellectual properties has become an arms race
11 between countries and within countries. I mean, there
12 is a race to generate more patents, which obviously
13 affects the quality of patents coming out of the
14 patent system because the examiner can only do so much
15 in a day.

16 And there is -- dealing with that through
17 the PTO process is really complex because you do not
18 want to throw the baby out with the bath water, and it
19 is a very, very slow-moving process. Now, this is all
20 playing out in a world where there are more patents
21 being filed, more startups being started, more
22 innovation taking place per day not only in the United
23 States, but across the planet.

24 And the chain reaction that takes place as a
25 result of the embryonic development of an invention is

1 now playing out on the street, whether it is patent
2 warfare between companies or eventually the way
3 companies are using patents to stifle innovation. And
4 it really does land on the FTC's doorstep. You folks
5 get to look at the system from the outside in and
6 filter the transformation that is taking place into
7 the system to something that is more palatable for the
8 market.

9 The other thing I would point out is there
10 is -- we are sort of at the end of an innovation cycle
11 where you have this percolation of ideas that have
12 resulted in a few really, really, really large
13 companies. You know, obviously, patents and the use
14 of patents and the functioning of a monopoly or
15 monopolies, they are very close cousins. And looking
16 at the way people with substantial market share are
17 using their weight in a market to impede innovators
18 from moving to market and growing themselves and the
19 use of patents within that drama I think is something
20 that needs to be examined very, very closely.

21 And that ultimately is harming consumers if
22 it plays out in the wrong way because you are
23 literally killing ideas before they get to market or
24 copying certain elements of an idea that serve your
25 business and help you maintain -- I do not want to say

1 a monopoly, but effectively large market share
2 position. And that is an area where I think there
3 should be much more activity inspection.

4 MS. MUNCK: Excellent.

5 Well, thank you all very much for your very
6 thoughtful contributions to today. I am serious, I
7 wish I could keep you up here for another two hours,
8 and I am sorry that I cannot. But please join me in
9 thanking our panelists.

10 (Applause.)

11 (Panel concluded.)

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1 COMPETITION POLICY AND COPYRIGHT LAW

2 MS. GILLEN: So welcome back. We are very
3 excited to present the FTC's first ever panel on
4 copyright issues, and we are grateful to have a
5 distinguished group of panelists with us here today.

6 Just briefly introducing everyone going down
7 the line, we have Eric Cady of the Independent Film &
8 Television Alliance; Meredith Rose of Public
9 Knowledge; Sean O'Connor of the University of
10 Washington School of Law; Tyler Ochoa of the Santa
11 Clara University School of Law; Keith Kupferschmid of
12 the Copyright Alliance; and Peter Menell of the
13 University of California, Berkeley School of Law.

14 So to kick things off, there have been a
15 number of technical and legal developments over the
16 past decade that have resulted in changes in how we
17 think about copyright law and the role it plays in the
18 promotion of innovation. I would like to hear from
19 each of the panelists to start. Which developments do
20 you think are the most significant and how have these
21 changes impacted competition and innovation?

22 We will start with Eric.

23 MR. CADY: Sure. Well, thank you to the FTC
24 staff for the opportunity to participate in this
25 afternoon's panel to share the experience and

1 perspective of the independent film and television
2 industry on competition policy and copyright law, both
3 of which are very important to the Independent Film &
4 Television Alliance.

5 IFTA represents more than 140 companies in
6 22 countries, the majority of which are small to
7 medium-sized U.S.-based businesses which have produced
8 many of the world's most prominent films, including 80
9 percent of the Academy Award winners for Best Picture,
10 since our association was formed back in 1980.

11 In contrast to the major studios,
12 independents are completely reliant on third-party
13 distributors from around the world and copyright is
14 the foundation for the financing and commercial
15 exploitation of their films and television
16 programming. Collectively, the independent sector
17 accounts for over 70 percent of all films produced in
18 the U.S. each year. As producers of much of the
19 innovative content that propels our digital economy,
20 IFTA and its members are strong supporters of measures
21 that promote competition policy, ensure consumer
22 protection, foster diversity in programming, and
23 choice for consumers.

24 In terms of developments over the past
25 decade, the marketplace has shifted to the internet

1 and digital rights are an increasingly important
2 element of production financing as the online
3 marketplace continues to develop and consumer demand
4 evolves.

5 While the internet creates important
6 opportunities for expanded distribution, new
7 audiences, new revenue streams for independents, it
8 also presents the biggest threat to our industry as
9 online infringement is allowed to flourish without any
10 effective means under current law to prevent or stop
11 the introduction and rapid proliferation of infringing
12 copies across the internet. The result is a distorted
13 marketplace where rights-holders are forced to compete
14 with pirated content often made available for free.

15 Copyright infringement damages independents
16 well beyond lost revenues by impacting their basic
17 ability to secure financing and distribution. Like I
18 said, independents depend on third-party distributors,
19 who prior to production contractually commit to pay a
20 minimum guaranteed license fee in exchange for the
21 exclusive right to distribute the finished product in
22 their particular territory. Those exclusive license
23 agreements are then collateralized to secure bank
24 loans to complete the physical production.

25 Online theft, which is often suffered on a

1 massive commercial scale, severely threatens the
2 balance of this creative and business framework,
3 impacting the ability of these critical early
4 investors to recoup their investment. More recently,
5 the widespread emergence of streaming piracy, enabled
6 by devices and add-on applications, is particularly
7 damaging since they normalize piracy and bring illegal
8 content into the living room through set-top boxes and
9 other internet-connected devices, often which have
10 sleek user-friendly interfaces.

11 While the major online platforms and service
12 providers now routinely deploy enhanced antipiracy
13 protections with respect to their own content and in
14 the context of agreements with large content
15 suppliers, they refuse to extend those enhanced
16 services to smaller content providers. This
17 discriminatory treatment creates a substantial barrier
18 for small content suppliers seeking to use the
19 internet to reach new audiences. The FTC should pay
20 particular attention to the platforms and their
21 discriminatory deployment of tools designed to protect
22 content on their systems, as the minimum legislative
23 requirements under the DMCA are no longer sufficient
24 in today's high-speed digital environment.

25 For example, in the case of Google, IFTA

1 members report being offered only the option of
2 continuing to send thousands of notice and takedowns
3 with respect to infringing copies found on YouTube or
4 the option to monetize those illegal copies by
5 allowing YouTube to place advertising on those copies
6 and sharing only a fraction of that revenue with the
7 content provider, rather than preventing the upload
8 and further illegal distribution of those files.

9 At the same time, the growth of online
10 platforms has been prioritized as a matter of public
11 policy overprotecting consumers from traffic and
12 illicit content, which has generated profit for the
13 platforms at the expense of legitimate rights-holders.

14 With this backdrop, there is a growing and
15 serious concern in the U.S. and around the world about
16 the lack of responsibility and accountability
17 exercises by the major internet platforms toward the
18 harmful and illegal activities taking place on their
19 services. The ultimate result here is a toxic
20 environment to conduct business and reach consumers.

21 IFTA has long been on the record with regard
22 to the competitive challenges facing independents in
23 the marketplace, whether arising from the integration
24 of major broadcast, cable, and broadband companies, or
25 today with the extraordinary growth of a handful of

1 online platforms, all of whom now produce and promote
2 their own programming.

3 Independents have limited leverage in
4 negotiating for access, good placement, marketing and
5 revenue shares with these major conglomerates and,
6 thus, access to independent programming is under
7 threat. The FTC should focus more broadly on the role
8 of these intermediaries, their placement of
9 advertising and self-dealing with access to
10 information, including consumer viewing behaviors.

11 In the European Union, the Commission has
12 already launched an initial investigation as to the
13 anticompetitive impact of Amazon using data it has
14 obtained from third-party merchants on this platform
15 to unfairly advantage its own business.

16 As further outlined in our written contents,
17 IFTA joins the other representatives of the creative
18 industries to call upon the Commission to exercise its
19 broad investigative authority to examine how today's
20 dominant internet platforms engage in practices that
21 harm competition in the creation and distribution of
22 copyrighted works, and in doing so, ultimately harms
23 consumers. Thank you.

24 MS. GILLEN: Thank you.

25 Meredith?

1 MS. ROSE: Thank you. First, I want to say
2 thank you to the staff of the FTC for organizing this
3 and for taking a good, hard look at some of the issues
4 in intellectual property and how those impact
5 competition and also for, obviously, inviting PK to
6 speak.

7 I generally wanted to speak about the issue
8 of copyright software and some of the ways that that
9 has had an effect on both issues of consumer confusion
10 and issues of anticompetitive behavior. Generally, I
11 think we have been both legally and socially caught a
12 little bit flatfooted when it comes to the role of
13 software and ownership and how those two things
14 interact with one another. Rather than recognizing
15 that software has the massive potential consequences
16 in our current legal system and potentially deserves
17 its own framework, we have sort of shoe-horned it into
18 some combination of contract law and copyright law.

19 Contract law, which is notably predicated on
20 the idea of there being a negotiation, which there is
21 not in most software contracts, and copyright law,
22 which is designed to respond to the specific pressures
23 with traditional creative works, such as music,
24 writing, art, et cetera, and is not particularly well-
25 equipped to deal with something with the sort of

1 hybrid-created functional nature of software.

2 So there are kind of three points at which I
3 think the rubber really meets the road on this and I
4 would like to discuss them briefly. One is that,
5 nowadays, we own very little as individuals.
6 Generally, everything is -- an item is mine only to
7 the extent that I do not do anything precluded by the
8 terms and conditions that are attached to the software
9 that runs the device. And as software has become
10 embedded in more and more devices, this implicates
11 more and more of the objects that we own, in scare
12 quotes, in many cases.

13 This can include everything from your phone,
14 which is a more obvious example, and your computer,
15 down to your watch, potentially down to your
16 refrigerator if you have a smart refrigerator,
17 somewhat famously, if you follow the Copyright 1201
18 hearings, down to your tractor, which is often
19 embedded with software. You only are allowed to use
20 the item -- you do not technically own it in a lot of
21 cases -- to the extent that you comply with the terms
22 and conditions of the end user license agreement.

23 And the moment you stop complying with those
24 terms and conditions, you are in a violation of
25 contract, which means that any subsequent or even

1 current, at that point, use of the software
2 constitutes software piracy that becomes a copyright
3 violation. And so, essentially, that -- when you
4 combine that with things like statutory damage
5 potentialities, you have \$150,000 for running a piece
6 of software in a way that the manufacturer perhaps
7 just does not like, for whatever reason, without
8 necessarily having a sort of legal or policy
9 justification underneath it. And this runs directly
10 up against consumer understanding and expectations.

11 We have a very specific -- perhaps not
12 specific, we have a very general, very deeply-rooted
13 concept, both socially and legally, of what
14 constitutes ownership and what I can do with something
15 when I buy it. Very famously, Aaron Perzanowski and
16 Chris Jay Hoofnagle did a study on the "buy now"
17 button as made famous on Amazon, but they did a mockup
18 at their own site, and the results of what people
19 thought they were getting when they clicked a "buy
20 now" button were pretty astounding.

21 Sixteen percent of participants thought they
22 had the ability to resell the e-book that they were
23 buying with a "buy now" button; 30 percent thought
24 they had the ability to leave it to other people in
25 their wills, which they did not; 40 percent believed

1 they had the right to lend or give it away, which they
2 do not; and more than 80 percent thought that they
3 owned the work and could keep it indefinitely and
4 could use it on whatever device they chose, which is
5 also not true.

6 The word "buy" has very different
7 connotations than pay for access to a license the
8 terms of which may change at any time, which is
9 functionally what the "buy now" button is. Anyone who
10 is on Twitter frequently enough as I am -- for one
11 thing I am sorry -- to you probably saw a viral story
12 about a gentleman who moved, I believe, from Australia
13 to Canada and found himself locked out of all of his
14 iTunes movie purchases. So this is kind of what we
15 are dealing with.

16 There is this gapping in expectation for
17 what a consumer comprehends as ownership and what
18 software companies and platforms represent as
19 ownership which in reality is sort of this complex
20 licensing schema. This has really large implications
21 for downstream commerce on top of everything else. If
22 I do not own the car, if I really -- I am operating
23 the software that is critical to running the car only
24 under a license, what are my options for things like
25 repair, replacement, modification or customization,

1 resale. Many times licenses prohibit or drastically
2 restrict these common behaviors or artificially limit
3 them to a few in-house or downstream-approved
4 providers.

5 Apple is uniquely bad about this. I say
6 this as someone who owns several Apple devices, but
7 the ability to only get your Apple device repaired by
8 an authorized Apple retailer is a problem and
9 sufficiently stifles downstream commerce.

10 And attached to copyright, we have sort of
11 copyright adjacent laws such as the anticircumvention
12 provisions of Section 1201 of the Digital Millennium
13 Copyright Act. And what these do for folks who are
14 unfamiliar with them is 1201 creates a separate right
15 of action for anyone who circumvents a technological
16 protection measure that effectively controls access to
17 a copyrighted work. You do not need to actually
18 implicate the copyright in the underlying work at all.
19 If you merely circumvent the digital lock on that
20 work, that, in of it itself, is a separate violation.

21 This has been used somewhat famously in the
22 example of John Deere tractors to control who is
23 allowed to repair your tractor. It came up -- every
24 three years, there is a triennial rulemaking hearing
25 that the U.S. Copyright Office engages in where they

1 issue exemptions to this, and it is a laborious
2 process to secure one, and you have to argue them de
3 novo every three years.

4 But one of the examples that came up this
5 year, in particular, which I wanted to flag was one in
6 avionics, which is the computers on board airplanes.
7 There is an FAA mandate that requires certain kinds of
8 security compliance testing and certain results. I do
9 not know what the exact schedule is, but the major
10 manufacturers of onboard avionics computers have
11 prohibited any independent parties from conducting any
12 of the mandatory software testing that they are
13 required to do by the FAA.

14 So to get these legally-mandated tests done,
15 you need to go to the in-house security penetration
16 testers who will only give you essentially a piece of
17 paper that says, thumbs up, in effect, and you can pay
18 extra to get access to the actual data that they were
19 able to get to.

20 So we have plenty of examples of copyright
21 and copyright adjacent law, such as 1201, controlling
22 downstream commerce in a way that was not within the
23 purview certainly of the original design, frankly, of
24 these laws. And at the end of the day, this kind of
25 just is evidence of this poor fit between modern

1 software and the sort of legal framework surrounding
2 it and how we traditionally envision ownership,
3 competition, resale, and issues like that.

4 MS. GILLEN: Thanks, Meredith.
5 Sean?

6 MR. O'CONNOR: Thanks. I want to thank the
7 FTC staff for bringing me in for this.

8 I have been on many sides of this equation,
9 the so-called innovator side, content creator side,
10 and a really important starting point is always that
11 creativity and innovation go hand in hand. They are
12 not necessarily in tension with each other. So a lot
13 of creators are innovators and innovators are
14 creators.

15 So what we really want to be thinking about
16 here is, how do we have robust markets and how do we
17 have free and fair competition? I still use, as a
18 starting point, copyright and other property rights,
19 that when you have those, then people can enter into
20 private market arrangements. So starting at that
21 point, we need to look at some of the arrangements
22 that are going on because we want to encourage this
23 kind of innovation in business models, innovation in
24 contracting, innovation in licensing, but we also want
25 to make sure that those things are not becoming

1 anticompetitive and that they are not harming
2 consumers.

3 I do want to scope my remarks here and say
4 that I will not be covering data or actually software
5 or industry-specific things like music just because
6 those are big rabbit holes that we could spend a lot
7 of time on, and maybe in the discussion we can go
8 through that. I think the best use of my time here
9 because of my particular background is making some
10 distinctions and talking about how I view the world
11 when helping clients and when doing research and
12 looking at this whole innovation and creative nexus
13 space.

14 So let's make a core distinction between
15 business-to-consumer licenses and business-to-business
16 licenses. That is standard kind of management school,
17 business school speak, but it just means that you have
18 some things -- like we used to call EULAs, end user
19 license agreements, today you normally think of them
20 as terms of service. It is all that stuff you click
21 "I agree" on and you do not really read it. You know,
22 we are not always sure what is going on with it, but
23 those are effective.

24 Now, within those, there is often copyright
25 licensing going on. Okay? Now, my remarks today are

1 mainly focused on that copyright part because that is
2 our panel here. So if we look at the terms of
3 service, the business-to-consumer, now we want to
4 think of some of the issues there. In a moment, I
5 will turn to the business-to-business and those are
6 less obvious to the regular outside observer. It is
7 the contracts behind the scenes that businesses do
8 with each other.

9 So on business-to-consumer, I think the
10 biggest question is, again, in copyright content, what
11 is being done with my stuff. That is what we all want
12 to know. We create stuff. Some of us do it as
13 amateurs. Some of us do it as professionals. And
14 then we enter into all these agreements online with a
15 lot of the internet giant companies and it is fun and
16 it is awesome that we can get our stuff distributed,
17 but we do not always know how those pipelines are
18 working and where everything is going.

19 We also know that a lot of consumers,
20 particularly teenagers, young adults, are learning the
21 hard way about that the internet is forever and some
22 of their stuff once posted kind of stays up there. So
23 we need to think about that a little bit.

24 Now, I am not against a lot of the licensing
25 models going on and I also want to be careful to carve

1 out the notion of contracts of adhesion, take-it-or-
2 leave-it contracts. That is what a lot of these end
3 user license agreements and terms of service are, but
4 there is nothing inherently wrong with those. But you
5 do sometimes want to scrutinize them a little more
6 carefully because of the fact you do not often have
7 real negotiating going on and people are not deeply
8 thinking about what is going on in the contract. So
9 we want to look at it a little more carefully.

10 A lot of us have heard about that mandatory
11 arbitration clauses can be difficult. So if I start
12 having concerns about where my stuff is going and do I
13 have a right to get my content taken back down, if I
14 dispute it, I am stuck in arbitration which may not
15 work for a lot of consumers. The notion of rolling
16 contracts where when I do that first "I agree," I
17 basically have kind of pre-agreed to changes that the
18 other company will make.

19 Now, it is true that there is some -- when
20 we teach contract law, we say consideration has to
21 happen. But the consideration is simply that in
22 exchange for you continuing to use the service, you
23 then agree to our new terms. But a lot of times
24 consumers do not even know that the terms have really
25 changed. So we need to worry about that. We need to

1 worry about the creeping differences in a lot of these
2 contracts so that what may have been reasonable
3 expectations for how your things could be used a
4 number of years ago may be different now because a lot
5 of these companies are kind of pushing further and
6 further on what can be done with the content. And,
7 now, that is what we call "expect." We expect it will
8 turn up everywhere.

9 What do we do about that? Also in an era of
10 disruption where the mantra is "ask forgiveness, not
11 permission," right? So let's keep pushing the
12 envelope and see what happens.

13 So on the business-to-consumer side, just a
14 couple of recommendations that might be worth looking
15 into. Following up on the notion of the right to be
16 forgotten that is being explored a lot in the EU and
17 other places, thinking about how to make it
18 enforceable that people can get control of their
19 content again and get it back out of these various
20 systems when they want to and when they need to.

21 I think perhaps -- again, I am pro-
22 licensing, but discourage some of these what I will
23 call perpetual licenses with these vague assignment
24 sublicensing provisions. This is going to feed into
25 my business-to-business comments in just one moment.

1 You know you are giving your content to one place, one
2 of these social media platforms, but then can it leak
3 out to other places? Well, of course it can if you
4 have agreed to allow them to sublicense it further and
5 they then can sublicense it out to lots of third
6 parties.

7 So we also need to be thinking about
8 guidelines and standards for those kinds of licenses
9 and also for thinking about enforceable public private
10 distinctions. We know that a lot of folks think that
11 they can have a private zone with just their friends
12 where their content is, but then sometimes it seems
13 like that becomes public and people are often
14 surprised about that.

15 Okay, shifting over business-to-business
16 now, we do not really know a lot about what is going
17 on with the contracts among a lot of the leading
18 internet -- I will call them sort of the internet
19 giants and a lot of the whole ecosystem of other
20 companies that rely on them. So we know what I will
21 call the public facing firms, the internet giants, we
22 know that they have the business-to-consumer licenses
23 in place. But in this behind the scenes we know
24 somehow it is linked back there to advertising and
25 search engine optimization and data mining, that thing

1 where when you search for something at one point and
2 then for the next week or so -- I was looking for
3 guitars recently and then every website I go to, even
4 on my phone, little ads are for guitars, you know, and
5 it is kind of embarrassing.

6 So how do those contracts work? See, they
7 have to be contracts. There is something going on
8 behind them that allows that stuff to happen. So I
9 think that what we want to do as well is look at is
10 there any potential unfair leveraging of the companies
11 that have the largest portfolios of the content
12 saying, look, if you want access to any of this
13 content, then you need to then sign these business-to-
14 business deals with us.

15 And a final point, because I am really
16 running low on time here, is that as these networks of
17 licenses are being put out there and created, are we
18 also displacing some of the other regimes for open
19 kind of content distribution, like creative commons,
20 which people could have some reasonable expectations
21 about how their things were being distributed now with
22 essentially kind of private networks of sets of rights
23 and what are our reasonable expectations around that.

24 So I think that looking at the behind the
25 scenes business-to-business licenses are as important

1 as looking at the business-to-consumer licenses. And
2 I think that the FTC using a lot of its longstanding
3 practice of issuing guidelines on licensing and
4 particularly looking at distinguishing horizontal and
5 vertical licensing would be a really good use of time.

6 Thank you.

7 MS. GILLEN: Thank you.

8 We are also joined by Peter Jaszi of the
9 American University Washington College of Law.

10 We have been talking about significant
11 developments and copyright law over the past several
12 years and particularly those that may impact
13 competition and innovation, and which do you think are
14 the most significant?

15 MR. JASZI: Thank you.

16 So one could describe the relationship
17 between copyright law and competition policy over the
18 course of my professional career as 50 years of
19 solitude with two discourses occupying essentially the
20 same policy space but resolutely refusing to
21 acknowledge one another's existence.

22 As any former students of mine in the house
23 will know, I have been predicting for many of those 50
24 years that there would have to be an eventual
25 convergence, if not a collision, between these two

1 lines of thinking. So I find the fact of this hearing
2 and the fact that I was invited to participate in it
3 very gratifying indeed.

4 I think I will begin by stating, rather than
5 belaboring, some four propositions that seem self-
6 evident to me, although there may be room to discuss
7 them later on. First, that the copyright monopoly in
8 nonrivalrous information goods is inherently
9 anticompetitive by both design and definition.

10 The second is that the commonly-held
11 assumption that copyright has some incentive effect on
12 innovation, although not inherently implausible, is
13 neither demonstrated or perhaps demonstrable. On the
14 other hand, we can show that follow-on creativity and
15 innovation necessarily does require reasonable lawful
16 access to preexisting content or works in copyright
17 jargon. And we can also demonstrate that, as an
18 historical matter, many of most of the significant
19 bursts of copyright-related innovation over time and
20 space, although particularly in the U.S., have been
21 closely associated with limited copyright protection,
22 either as a formal or a functional matter for the
23 information goods in question.

24 In other words, although both the individual
25 consumer and the general innovation climate benefit,

1 we believe, from right-sized copyright protection,
2 neither is likely to thrive in an environment of
3 hyperprotection.

4 From that perspective, I want to make four
5 points about copyright doctrine at this moment of
6 convergence, and all relate to what I think are, in
7 one way or another, urgent items, action items, or as
8 the case may be, inaction items. The first two are
9 about the importance of maintaining or nurturing
10 certain existing procompetitive features of copyright
11 law, while the second personal pair relates to some
12 features of that law that may now require
13 reconsideration.

14 First, the fair use doctrine, the general
15 safety valve of the U.S. copyright system, is more
16 important today than ever before. Although it dates
17 back to at least 1841 in one form or another, fair use
18 has come into its own only really in the post-war
19 period and especially in the last 25 years. Under
20 current Section 107, the doctrine is in a pretty good
21 place now, both textually and jurisprudentially.

22 Later on, I would be happy, if anyone were
23 curious to multiple examples of how fair use promotes
24 competition of all kinds. But for now I will simply
25 say that in years to come, the doctrine must be

1 preserved from both its enemies and its friends. Its
2 enemies would like to water it down and at least some
3 of its friends would like to enhance its short-term
4 clarity at the expense of its longer-term flexibility.
5 Both temptations should be resisted.

6 Another existing doctrine that stands in a
7 very different place is copyright misuse. This is, as
8 yet, at least an underrealized, underutilized
9 doctrine. It is of relatively recent vintage, but it
10 has enormous potential. It has been a wallflower at
11 the ball of copyright for a while, but I think it may
12 be about to come into its own.

13 The doctrine, which could serve, and
14 occasionally has served, to port competition
15 policy considerations into the heart of copyright
16 litigation as memorably, for example, in the Practice
17 Management Information Corporation vs. AMA case, is
18 one that is worth watching and especially for
19 academics who care about the -- I should say judges
20 and academics who care about the competition copyright
21 nexus to promote.

22 Now, let me turn very briefly to two
23 copyright doctrines that I think in this moment have
24 gone far and off the rails to require some urgent
25 reconsideration if this procompetitive right-sizing of

1 doctrine is to be achieved.

2 One is, of course, the rules relating to
3 statutory damages, which is presently constituted,
4 consistently operate to discourage procompetitive good
5 faith risk-taking by innovators. Over the last half
6 century, the relevant provisions of Chapter 5 of Title
7 17 have lost all semblance of a nexus with their
8 original purpose, which was to fairly compensate
9 successful plaintiffs in cases where actual damages
10 were especially difficult to prove.

11 Today, they serve explicitly punitive and
12 deterrent functions and they are deployed accordingly
13 by rights-holders not just in court, but also in all
14 kinds of prelitigation skirmishing. The result, of
15 course, is that small innovators are chilled into
16 making risk-averse choices to the general detriment of
17 all. Statutory damages may have a continuing role to
18 play in cases involving out-and-out commercial piracy,
19 but they have grown out of all proportion to their
20 true utility and urgently need a good pruning.

21 Finally, let me note that before it is too
22 late, and it may be too late very soon, some of our
23 basic assumptions about authorship and initial
24 ownership of copyright could use a stem-to-stern
25 reconsideration. We know that in years and decades to

1 come, more and more copyrightable works from databases
2 to computer programs to art will be produced by
3 effectively autonomous intelligent agents which
4 themselves in turn will, in many cases, be the
5 products of yet other AIs.

6 Right now, we are not up to the question of
7 how rights of ownership under copyright in such
8 productions will be or should be assigned. The best
9 guidance we have is that perhaps they might be
10 allocated to the person or the company that was the
11 first mover, so to speak, in setting the train of
12 machine authorship in motion. But that is, for many
13 reasons, a very unsatisfactory solution.

14 The most important of those reasons being
15 that it will, of course, or the application of such a
16 rule will, of course, over time have the effect of
17 creating greater and greater consolidation and
18 concentration of ownership where information products
19 are concerned. That is an outcome about which
20 considerations of both competition policy and broader
21 social policy suggest extreme caution.

22 Thank you.

23 MS. GILLEN: Thank you.

24 Tyler?

25 MR. OCHOA: So I think my comments will echo

1 many of the theme that we have heard on the panel
2 here, but hopefully with a bit of a different spin in
3 a couple of areas.

4 So the two things that I wanted to address
5 were sort of abusive end user license agreements and
6 artificial intelligence. With regard to the end user
7 license agreements, we see abuse in both directions.
8 We see abuse directed towards copyright owners in some
9 instances and we see abuse by copyright owners in some
10 instances.

11 So Sean talked about terms and conditions in
12 end user license agreements that automatically assign
13 ownership of a copyrighted work to the social media
14 platform or have such a broad license that it
15 essentially renders any type of commercial use
16 available to that platform. You see this in lots of
17 areas where people post things to social media or post
18 photographs, maybe they will enter a contest for -- a
19 photography contest for the best type of picture you
20 can have of wildlife and the terms and conditions
21 specify that the user can do absolutely anything they
22 want to do with that.

23 So that is taking advantage of copyright
24 owners who want to see their work reach a wider
25 audience, but then the terms and conditions allow that

1 work to be used for commercial purposes without any
2 further consideration. Definitely people should know
3 what it is that they are signing up for when they post
4 things. People should have the ability to post things
5 and have them disseminated without giving away all of
6 their rights or most of their rights.

7 On the flip side of this is abuse of end
8 user license agreements by copyright owners. And
9 copyright law is designed very differently from patent
10 law. Patent law gives the patent owner an exclusive
11 right to use the patented invention, although even
12 there, under the first sale doctrine or the doctrine
13 of exhaustion, once you have sold the machine
14 embodying a patented invention then you can continue
15 to -- then the buyer can use it in any way that they
16 see fit.

17 But with copyright law there is not even an
18 exclusive right to use a copyrighted work. The
19 exclusive rights of reproduction and distribution
20 exist. The exclusive right of public performance and
21 public display exist. But there is no exclusive right
22 of private performance. One is able to read a
23 copyrighted work as many times as one wants. One is
24 able to listen to a copyrighted work as many times as
25 one wants. It is specifically designed not to control

1 individual behavior.

2 And, yet, we see copyright owners using end
3 user license agreements terms and conditions
4 specifically to give themselves a right of private
5 performance specifically to control user behavior so
6 that persistent access controls, you cannot
7 necessarily listen to or watch this as many times, but
8 only X number of times for a particular purpose. You
9 have a copy that resides permanently on your hard
10 drive, but you are only going to be able to use that
11 for the next five years and then it is going to go
12 away or you have to enter some sort of download code
13 in order to be able to use this copy further. And we
14 see that both with regard to traditional media,
15 digital copies of traditional media, and, in
16 particular, with regard to software.

17 So that you own a copy of software, but the
18 software company alleges that you are the only one who
19 can use that and you cannot even lend your laptop to
20 somebody else and let them use it because they do not
21 have a license from the software owner.

22 I might add that even the term "license"
23 itself is a bit of a stranger to basic copyright
24 doctrine, which talks in terms of sale or other
25 transfer of ownership or rental lease or lending.

1 Those are the only two options under the public
2 distribution right, sale or other transfer of
3 ownership or rental lease or lending.

4 And what you have is software companies and
5 owners of digital content contending while it is not
6 really a sale, you did not really buy something, so
7 you do not own it, but they are also not claiming that
8 it is a rental lease or lending because they know if
9 they did that that consumers would rebel against the
10 notion. Instead, they use the ambiguous term
11 "license" as if they had the right to control of
12 anything you did with a copy that you owned
13 permanently. So I think seeing that sale is defined
14 in a particular way so that these abuses could be
15 lessened would be very helpful.

16 The second area of concern I think is
17 artificial intelligence and Peter mentioned one
18 concern which is we are going to see some type of
19 artificial intelligence or machine learning generating
20 copyrighted works. I want to look at the other side
21 of that for a minute, which is how artificial
22 intelligences are trained because they have to be
23 trained using very large data sets. And data sets, by
24 definition, are often going to be copyrighted works.

25 If you are training using large areas of

1 text, you need lots of textual works, which are
2 subject to copyright. If you are training using a
3 large data set of photographs, the photographs are
4 subject to copyright. So in order to do research in
5 AI, in order to train in artificial intelligence, one
6 needs access to large data sets.

7 Well, where are we getting those data sets
8 from? The only people who have large data sets are
9 typically large platform owners, large content
10 providers. One of the terms and conditions in which
11 those data sets will be made available to researchers,
12 one of the terms and decisions on which those data
13 sets would be made available to developers of
14 artificial intelligence, will they be licensed on a
15 nondiscriminatory basis and so forth? So I think
16 those are a set of issues that are worth considering.

17 And related to that we have the problem of
18 bias in the data sets. Because we see evidence that
19 the data sets you use influences how machine learning
20 learns. So for example, when you are trained on a
21 data set of photographs of white people, facial
22 recognition works very well when you are recognizing
23 the faces of white people and works much more poorly
24 when trying to recognize the faces of people with
25 darker skin because the artificial intelligence was

1 not trained on that data set.

2 So what can we do to assure that the data
3 sets that are being used are nondiscriminatory, are
4 representative, and are not building additional biases
5 into the system. So those I think are issues that
6 could be profitably looked at.

7 Thank you.

8 MS. GILLEN: Thank you.

9 Keith?

10 MR. KUPFERSCHMID: I want to thank the FTC
11 for inviting me to speak here today on the panel on
12 competition policy and copyright law. Thank you all
13 for attending and everyone online.

14 My name is Keith Kupferschmid. I am the CEO
15 of the Copyright Alliance, a nonprofit, nonpartisan
16 organization dedicated to advocating policies that
17 promote and preserve the value of copyright. We
18 represent the copyright interests of more than 1.8
19 million individual creators. Those are creators, like
20 artists and authors, performers and photographers,
21 songwriters, software coders, and numerous other
22 individual creators who make a living through their
23 creativity. In fact, the foundation of copyright is
24 built on the creativity and ingenuity of these people.

25 The Copyright Alliance also represents the

1 copyright interests of over 13,000 organizations
2 across a spectrum of disciplines. When most people
3 think of a copyright, they may think of the
4 entertainment companies in associations that we
5 represent, but copyright protection is much -- is
6 crucial to so many more organizations ranging from
7 book, magazine, and software, and newspaper publishers
8 to organizations that you might not think of as
9 relying on copyright law, like the NBA or the National
10 Association of Realtors or the National Fire
11 Protection Association.

12 There is one thing that unites all of these
13 individuals and organizations that are otherwise very,
14 very different, and that one thing that unites them is
15 their reliance on copyright law. It is copyright law
16 that protects the fruits of their creativity. It is
17 copyright that protects their basic freedoms, their
18 freedom of expression, their freedom to pursue a
19 livelihood and a career based on their creativity and
20 innovation. It is copyright that protects, that
21 safeguards their rights afforded them under the
22 Constitution. It is copyright that propagates
23 America's culture around the globe. It is copyright
24 that promotes competition and innovation and it is
25 copyright that is crucial to the success of the U.S.

1 economy as evidence by the fact that the core
2 copyright industries add \$1.2 trillion to the U.S.
3 GDP and employ nearly 5.5 million people.

4 Now, I would like to highlight one of those
5 core industries, the software industry, because many
6 people may not understand just how reliant the
7 software industry is on copyright protection. No
8 other country can boast a software industry as vibrant
9 as the United States. And that is in large part due
10 to our strong framework of copyright protection.

11 Because most software is created through
12 collaboration, copyright is often the only viable form
13 of protection, especially where patent protection is
14 uncertain following the Alice case. If copyright for
15 software is diminished by overly-broad applications of
16 fair use or by denial of protection, the software
17 industry will be forced to retrench to a closed model
18 no longer sharing code and instead relying on
19 proprietary contracts to keep code protected. That is
20 a step in the wrong direction.

21 The economic premise of copyright is that
22 protecting priority rights in creative works will
23 promote innovation. This premise is reflected by the
24 Constitution and supported by both the FTC and the DOJ
25 in their report entitled, Antitrust guidelines for the

1 licensing of intellectual property.

2 Somewhat contrary to what Peter Jaszi
3 commented earlier, in that report the FTC and DOJ
4 confirm that the ability to license content can have
5 procompetitive effects for both the copyright holder
6 and the licensee by increasing the value or utility of
7 the copyrighted content and, thereby, encouraging the
8 copyright holders investment in it.

9 Now, over the past decade, the creative
10 community has embraced the internet and the growing
11 capabilities of technology to make their copyrighted
12 works more widely available and more easily accessible
13 to the public. The result is that consumers today
14 have a wealth of ways to access and enjoy all sorts of
15 copyrighted works and creators have many more
16 platforms to reach their audiences and customers.

17 All sectors that rely on copyright law have
18 seen and continue to see great transformations due to
19 shifting legal developments, evolving business
20 practices, and new technologies. We have seen
21 business models shift from download to streaming, from
22 access on one device to many devices, from ownership
23 of physical goods like DVD to access to copyrighted
24 works in digital formats like on demand and
25 subscriptions and many more.

1 Throughout these transformations, the one
2 constant has been the importance of robust and
3 meaningful copyright protections. Importantly, this
4 includes the protections afforded to technological
5 protection measures, or TPMs, which allow the creative
6 industries to offer users and audiences these and
7 other new experiences that otherwise would not be
8 possible.

9 Despite the success of TPMs, piracy remains
10 a significant problem. For every technological
11 advance that makes it easier for creators to reach
12 consumers, there are bad actors one step behind that
13 exploit these new capabilities through new forms of
14 piracy. Piracy is the antithesis of competition. It
15 threatens competition by allowing others to exploit
16 works without compensating their creators, reducing
17 the commercial value of the creator's work, and
18 weakening incentives to invest to the consumer's
19 detriment.

20 While online piracy remains a persistent
21 problem, it is especially harmful to small creators.
22 PPA reports that 70 percent of all professional
23 photographers have been victimized by copyright
24 infringement multiple time in the past five years.
25 Because the federal courts have exclusive jurisdiction

1 over copyright claims and federal litigation is so
2 expensive and so complex, most individual creators and
3 small businesses and micro businesses simply cannot
4 afford to enforce their rights.

5 The income they lose from piracy may seem
6 insignificant to some, but to them it is the
7 difference between staying in business or being able
8 to travel to a location where they could create their
9 next photo or their next book. For this reason, the
10 Copyright Alliance is a strong supporter of
11 legislation to create a voluntary small claims
12 tribunal within the U.S. Copyright Office.

13 While online piracy continues to be a
14 problem, new threats such as illicit set-top boxes and
15 stream-ripping services have emerged to contribute to
16 the environment of lawlessness that is hindering
17 competition and innovation. Stream-ripping is a
18 process by which everyday listeners can rip a file
19 from a streaming platform and convert it into a
20 download file. Apps that facilitate this process are
21 rapidly growing in popularity.

22 The difficulty in combating this problem is
23 that there are no infringing links or content to
24 pinpoint and eliminate. Instead stream-ripping
25 software targets legitimate streams and creates

1 illegal reproductions.

2 Another emerging threat is illicit streaming
3 devices or ISDs. The most prevalent ISD is the Kodi
4 box, which is a legitimate media player that is easily
5 configured to access illegal streams of copyrighted
6 works that are available online. By pirating these
7 works, ISDs harm not only copyright owners, but also
8 impair competition by harming legitimate streaming
9 services such as Netflix and Hulu, that are licensed
10 to provide content and increasingly produce their own
11 works. They also harm the many creative professionals
12 who contribute to these entertainment products by
13 decreasing the revenue pie that serves to stimulate
14 further creativity.

15 As noted in an FTC blog post, many of these
16 ISDs are often rife with hidden malware that can
17 bombard users with ads, that can take over their
18 computers, and that can steal their personal
19 information. Importantly, these ISD distributors also
20 often advertise their products as legitimate while at
21 the same time promoting their illegal usage. This is
22 one area where the FTC should be able to help.

23 The FTC has extensive powers under Section 5
24 of the FTC Act to police and pursue instances of false
25 and deceptive advertising and promotional schemes. To

1 the extent these distributors of ISDs or stream-
2 ripping software advertise their products as 100
3 percent lawful or inflict consumers with damaging
4 malware, the FTC should consider pursuing them for
5 misleading and impairing customers and harming
6 competition. Thank you very much.

7 MS. GILLEN: Thank you.

8 Peter?

9 MR. MENELL: Good afternoon, everyone.

10 I wanted to widen the lens to think about
11 the problems we will be facing in the coming decades.
12 It has taken a while for copyright to hit the FTC's
13 agenda, but I think it is going to be a recurrent
14 issue and trying to think through some of the more
15 profound changes that have been going on in the
16 content ecosystems.

17 So I want to go back to the founding of the
18 country and really the roots of our copyright system.
19 This notion that we can, through markets, promote
20 creativity; that by creating a system of exclusive
21 rights, our government can mimic the way some other
22 markets work in order to motivate people to create
23 works. And I would say for much of the early history
24 of this country, that model worked. Publishing began
25 through the copyright system, was very much fed by the

1 copyright system, and to this day, we still see the
2 copyright system functioning in that way.

3 But Elizabeth asked us at the beginning what
4 changes over the last decade or two have changed the
5 way in which these ecosystems function? There has
6 been a rather remarkable shift that I think has
7 happened without many of us realizing it. We can
8 think about many content companies operating in the
9 way that Eric's clients do or Keith's clients do or
10 there are individual creators who create things.

11 But, now, we are also in a world in which
12 there are companies that are operating in the content
13 space, but their modus operandi is not to sell works
14 to consumers, not to use the copyright system in the
15 way that it was understood. In fact, the most
16 successful companies or some of the most successful
17 companies today are companies that have developed
18 social media and other platforms in which copyright
19 plays a central role, but does not operate in the
20 typical way.

21 Now, in order to fully explain the story, we
22 have to go back maybe a century to the birth of the
23 broadcasting industries. And in order for that
24 industry to take off, we needed advertising.
25 Advertising was a way to enable companies to build

1 broadcasting. Since there was no way to create
2 turnstiles or other ways of paying, advertising came
3 in and for half a century or more it was an essential
4 part of broadcasting, which is also very central to
5 the media and the copyright industries.

6 But with social media we have seen a shift
7 and a lot of the use of the social media platform is
8 actually not to serve in this primary function, but
9 really as a data collection system so as to improve ad
10 targeting. And this ad targeting is really a major
11 shift in the way the copyright and the larger
12 ecosystem functions.

13 So how would I highlight this shift? So it
14 is not as though internet companies in the content
15 space are operating in the same way. Netflix, for
16 example, harvests data to help them identify what
17 would be good content projects to develop. And I
18 think that, in some ways, harkens back to the way
19 copyright has always been used. But when you think
20 about Facebook or perhaps YouTube, that a lot of what
21 is going on there is the content is being pushed out
22 really to monitor user behavior. So it fits into some
23 of the other themes we have talked about, about how
24 contracts and all kinds of new licensing models are
25 playing into this new world.

1 And so I think it directly connects to the
2 FTC in the sense that we are now really seeing how
3 consumer protection is really intersecting with the
4 copyright system and that a lot of these phenomena --
5 and I am on the fence about what to do or even what to
6 think about these things -- but it is a dramatic shift
7 in the way in which many companies operate. Their
8 goal is to use copyright as really a data collection
9 mechanism, and then they work with data brokers and
10 other companies to better target ads, and then we get
11 into what you might call the unintended or side
12 effects of some of those.

13 And I will say the last election cycle is
14 one of the side effects that we found that the same
15 tools that were developed for ad targeting were
16 harnessed to very much influence democracy. That is
17 something that I would say is of great concern. I
18 know it is a very sensitive topic especially here in
19 Washington, but it is one that we are confronted with
20 because now we have built tools that allow very
21 effective targeting of ads and the whole ad industry
22 is not so much oriented towards providing information
23 so much as persuading us, manipulating us. So I think
24 that these issues are now in play in a big way.

25 The other thing I would say -- and this is

1 perhaps more of a paternalistic view that I have --
2 but I am brought back to the work of Thorstein Veblen
3 in thinking about how conspicuous consumption is fed
4 in our society, and I think we are now living through
5 Veblen on steroids, that we have created through
6 social media, especially towards vulnerable
7 communities. We have created ways in which we are
8 vastly reshaping the way in which people grow up in
9 our country and the way in which they experience both
10 content and advertising as kind of served up together.

11

12 The other place we see is this is with
13 embedded advertising. That, in some ways, as a result
14 of commercial skipping, we have now created a content
15 industry that is very much focused on bringing
16 advertising directly into the products we create. So
17 I am really putting this out as food for thought for
18 trying to think about the very large issues.

19 I will just briefly comment and maybe we
20 will come back to some of the other issues. There is
21 another interesting competition issue here that one of
22 the big problems we faced with the internet was the
23 illegal downloading. I agree with Keith and Eric that
24 this was a big concern. But we partially solved that
25 problem through competition.

1 As Netflix was able to create and other
2 companies, HBO GO, Hulu created very effective
3 streaming systems, we saw a lot of people leave the
4 illegal towards the legal, but we are now coming into
5 another phase of this. And that is because we have so
6 much fragmentation of streaming that we are seeing,
7 yet again, a rise in illegal content because people do
8 not want to subscribe to eight or ten services in
9 order to get everything they want.

10 So I think that is an interesting
11 competition issue that is relevant and, in some ways,
12 it is within the control of the industries, but will
13 require us to rethink antitrust law because we, in
14 some ways, want to create, as Spotify is doing in the
15 music area, we want to create an easy way for people
16 to gain access to a lot of content, but as we also
17 want to have competition, that means when Disney
18 enters the market, as they will in the coming year, we
19 are going to see a tremendous amount of fragmentation
20 which will, again, stoke the fuel of the piracy
21 concerns.

22 Last but not least, and I cannot resist,
23 partly because Keith somewhat raised this issue, this
24 idea that software is protected by copyright is a
25 very, I think, easily distorted issue. And the

1 Oracle-Google litigation, I think, highlights an
2 important reason why we ought to keep on the FTC
3 agenda competition in the software industry.
4 Functional specifications are not the kinds of things
5 that copyright protects. And the courts had largely
6 resolved that issue and, now, because of the Federal
7 Circuit's misinterpretation of Ninth Circuit law, we
8 are now having to revisit that issue. And I think it
9 is unfortunate.

10 And the other problem we have is that the
11 Federal Circuit does not sit as an independent
12 circuit. It was supposed to apply Ninth Circuit law,
13 and it did not. And, now, perhaps the Supreme Court
14 will take the case. I am not sure what they will do
15 with it. But whether or not they do, I think that it
16 would be -- especially if the Federal Circuit law
17 remains the same, I think it is a legislative issue
18 now; it is a policy issue. And we should definitely
19 keep that issue on the front burner because platform
20 competition and interoperability and functional
21 specifications are essential to the kind of valuable
22 competition that supports.

23 So I am a fan of copyright protection for
24 software, but not for functional specifications. I
25 think it has to be very narrow. It has to be limited

1 to preventing piracy. But once we get into how a
2 machine works, we are in the patent realm, and that
3 creates other issues that we talked about this
4 morning, but I am willing to say it is better fought
5 there than in copyright. Thank you.

6 MS. GILLEN: Thank you.

7 And I am sure you all have questions for
8 each other. I know there have been a lot of different
9 issues raised. But I just want to kick things off
10 with a question about end user license agreements
11 since I think a few of you touched on that issue in
12 your remarks, particularly the gap between consumer
13 knowledge and the actual terms of a particular
14 agreement.

15 My question is, what can the FTC do, what
16 can we look for, what further research can be done, to
17 better identify those types of arrangements that may
18 fall into the anticompetitive realm?

19 MS. ROSE: I can speak sort of very briefly
20 to it. Like I mentioned in my opening statements,
21 there has been some research done on this. And it has
22 followed -- Perzanowski did the research and he
23 actually -- the second part of the study, which I did
24 not get to mention, is that they proposed a kind of
25 alternative to a "buy now" button which had a labeling

1 system which clearly -- it had a thumbs up and a
2 thumbs down. Next to the thumbs up, it said, here are
3 things you can do with this and here are things you
4 cannot do with this. And they found that that had a
5 remarkable effect in increasing consumer comprehension
6 of what they were doing.

7 The scholarship around this thus far has
8 mostly focused on just the fact that the phrase "buy"
9 or "buy now" tends to create a high degree of consumer
10 confusion. So I think they are -- you know, having
11 not spent nearly as much time on this as some other
12 folks, I think that there is probably some answers in
13 labeling requirements to some extent. It is certainly
14 a place to look.

15 MR. O'CONNOR: So I would say there is a
16 tension, and the tension when you are practicing law
17 is you have your clients want you to do a really
18 simple agreement, simple license, kind of like the
19 here is what you get, here is what you do not get.
20 And then every time you simplify, you kind of lose
21 some of the nuances of the exact legally enforceable
22 language. So that is a bit of a problem.

23 I think the way you can kind of thread
24 between those, though, is getting some standard
25 adopted language as to what these kinds of clauses

1 mean so that you know that you can do that sort of
2 summary of here is the bullet points. But, again, a
3 lot of us who are writing these licenses are very
4 concerned that if consumers only see the simplified
5 five bullet points, they are missing a lot of nuances
6 of what is really going on behind that license.

7 So having something that is kind of
8 approved, maybe FTC approved, as to what certain
9 clauses mean and if everyone can agree, okay, so this
10 gives me that right, this clause gives me that right,
11 this clause does this, this clause does that.

12 MS. ROSE: Yeah, I would sort of push back
13 on that and say that the amount of information that
14 they are getting off a thumbs up/thumbs down button is
15 still more than they are getting now because no one is
16 reading the license agreements. So you are moving
17 from -- you know, you are moving maybe only to 10 out
18 of 100 points, but you are moving from zero. So it is
19 a marginal, albeit, perhaps not a sufficient step up.

20 The other thing -- and I say this as a video
21 gamer, there are a lot of cases in which violation of
22 terms of service have led to essentially copyright
23 claims for things that are fundamentally not copyright
24 issues, but because the behavior revoked the license
25 agreement then it became an unlicensed use of the

1 software for things that are essentially just boiled
2 down to developer preferences about user behavior.

3 I think that there might be an answer in
4 looking for ways to ensure that the copyright aspect
5 of them -- of these end user license agreements are
6 decoupled from other behavioral preferences that are
7 expressed by the copyright holder and licensee so that
8 we do not have a situation where, you know, if I found
9 an exploit in my game of Fortnite that lets me be a
10 great sniper, that using that exploit does not
11 necessarily land me or my daughter, who is probably
12 more likely to do this, on the hook for \$150,000 of
13 statutory damages.

14 MR. O'CONNOR: So my point, though, is that
15 you are not going to get lawyers to stop doing the
16 full license agreement. I mean, FTC would have to do
17 something really heavy-handed like, say, oh, private
18 people, you cannot do your own licenses anymore. And
19 instead what we have is if you have some bullet points
20 that do not accurately reflect what the legal language
21 is, you can do more damage as well because it is out
22 of sync now.

23 MR. OCHOA: So I think there has been a very
24 good model of what Sean maybe has in mind through
25 Creative Commons where Creative Commons has end user

1 license agreements in legal language, but has
2 summarized and provides a suite of options that
3 consumers can do for -- you know, you can do this for
4 commercial purposes or noncommercial purposes, with or
5 without attribution and so forth.

6 And by far, the most popular of the Creative
7 Commons license is the noncommercial with attribution
8 license. Right? Because consumers want attribution,
9 do not necessarily want money, but sometimes they do
10 -- you know, if there is going to be a commercial use
11 of their work, they would like to be able to share in
12 that, so the notion that approved terms and conditions
13 that provide a suite of options to consumers and also
14 perhaps prohibiting some of the more onerous terms.
15 There really should not be automatic assignment of
16 your entire copyright in a contract of adhesion, I do
17 not think. Right? That is just not something that
18 should be permitted. That should be only allowed on
19 perhaps on an individually negotiated basis.

20 MR. KUPFERSCHMID: If I could add something.
21 First of all, I want to associate my comments with
22 Sean. I think he identified very clearly, very well
23 the sort of push and pull between the lawyers and
24 trying to get all the terms in there and trying to
25 make the agreements as simple as possible.

1 I think, in the Creative Commons example,
2 you still even see litigation in the Creative Commons
3 area with license. So there still are certainly
4 issues with people still not understanding what they
5 can and cannot do even with regard to those licenses.
6 So I do not think they are that unique in that regard.

7
8 I mean, if we are talking about consumer
9 education, that is something we are all for, that we
10 want consumers to understand what they are buying,
11 what they are licensing, how they can use or not use
12 the products. If we are talking about sort of
13 mandatory contractual provisions or limitations, I
14 think we are getting into a very different territory.
15 So, you know, thumbs up on -- if we are using the
16 thumbs up analogy, thumbs up on education. But I
17 think beyond that, I think we are going a little too
18 far.

19 MR. JASZI: I would suggest returning to the
20 original question that although I think the work on
21 the disparity between consumer perceptions and the
22 realities of the licenses to which they agree is
23 enormously useful. There may also be room for some
24 expert study of the question of to what extent and in
25 what ways end user licenses in general constrict or

1 undermine or revise the classic copyright assumptions
2 about consumer freedom.

3 Copyright, for most of its existence, has
4 operated on a set of assumptions about what consumers
5 can do not only with physical objects they acquire,
6 but also with the content of those objects. Some of
7 those assumptions are memorialized in doctrines like
8 the first sale doctrine or the fair use doctrine.
9 Others are a little more inchoate, I think, but
10 nevertheless important.

11 There is room for someone, whether it is an
12 FTC study or not, I am unsure, I think to look
13 carefully and, if I may say, scientifically at the way
14 in which the terms and conditions of the full range of
15 available EULAs stack up against those classical
16 assumptions about consumer freedom.

17 Again, in the promising world of new
18 business models, as it has been presented today, it
19 may well be that overall as a society, we want to
20 reimagine the position of the consumer and copyright
21 law to be a much more passive and a much more
22 restricted and a much less creative one than has
23 historically been the case. But we ought to know what
24 we are doing and we ought to do it self-consciously if
25 it is going to occur.

1 MR. KUPFERSCHMID: If I could just add to
2 one thing Peter just said. I think we have to be
3 careful, though, with -- which you mentioned sort of
4 historically and sort of classic set of assumptions
5 about consumers, what they can do. I think the one
6 thing we have learned over the past decade, if not
7 longer, so is that what consumers want to do is
8 changing rapidly. And that is why the copyright
9 industries, the creative industries have been
10 transforming their business models over time, like I
11 mentioned before, moving from a download model to a
12 streaming model, moving from a model which allows
13 access from just one device to many devices or in many
14 different locations.

15 And so, that sort of assumption is what
16 consumers -- that did not exist 20, 30 years ago,
17 whatever, but now it does. And so I know the creative
18 industries are responding to that. So I think we need
19 to be careful about relying on too much about what
20 consumers historically maybe want to -- and recognize
21 that there is -- there is also what they are looking
22 for today, which is oftentimes very different.

23 MR. JASZI: By the same token, however, it
24 is clear that consumers coming up are being rapidly
25 socialized into a system in which they lack the same

1 expectations about consumer freedom that previous
2 generations had. In other words, it is a chicken/egg
3 problem to some extent. Consumers will learn to be
4 satisfied with what providers provide, and so I do not
5 think that any more than classical assumptions about
6 how copyright promotes markets are irrelevant today.
7 I do not think that classical or historical
8 understandings about the idea of consumer freedom are
9 irrelevant either.

10 MR. O'CONNOR: Licensing has been around for
11 quite a while, though, and I think we want to be
12 careful about that. For a long time, musical scores
13 to orchestras have been under what I always called the
14 lease license, a physical copy is sort of leased and
15 then you get a license to do some performances. So I
16 do want to be a little careful about what we say are
17 some of the classical senses of what the expectations
18 are. There is a richer licensing history going back
19 over time.

20 MS. ROSE: And, realistically, I think we
21 also need to cabin all these discussions by saying the
22 business-to-business and business-to-consumer models
23 are very different. Presuming even in the case of a
24 relatively small business, perhaps in cases of all but
25 the smallest of businesses, you are going to have some

1 sort of more or less comparable legal involvement on
2 both sides.

3 I can certainly cabin my comments to the
4 situation of an uninformed nonexpert consumer. I sort
5 of use my parents as the meter stick. Sorry, mom and
6 dad. You know, they are boomers. They grew up with
7 certain expectations about the things that they use
8 and what they can do with them. And that is kind of
9 model that I am operating off of.

10 MR. MENELL: I would just add that there are
11 players in this mix that we do not even know much
12 about. There is a whole sector of data brokers and,
13 believe me, I am trying to figure that sector out.
14 And when Facebook gets information through your use of
15 their site and they say, we are not doing it, we are
16 not going to use it in certain ways, putting aside the
17 data breach and other problems that they have had, I
18 think there is a whole layer of the economy that is
19 not well understood, that is pretty well capitalized,
20 that is sort of operating -- and I do not use the word
21 "troll" lightly, but they are able to connect a lot
22 more dots in our personal dossiers than we may
23 realize. And it is obviously hitting much bigger sort
24 of political and democracy-related issues.

25 But the FTC is potentially a place to look

1 at that issue, because it has to do with competition
2 in some of the most important markets, and whatever
3 agreement I have with Facebook, I do not know their
4 agreements with the further deeper state of data
5 brokering. So that is going to connect to Madison
6 Avenue and the whole advertising world.

7 And I just think that we ought to know as a
8 society -- we ought to have transparency about all of
9 these different layers, and I think the FTC is one of
10 the few places that can do that.

11 MR. O'CONNOR: I think it is the B2B issue
12 again. And what is critically important is to look at
13 some exemplars of it. When you have Facebook or
14 Google, you can log in to other sites. And then there
15 was a hack of that and that was problematic. But
16 people were focused on, oh, my other sites may have
17 been compromised. But to me as a transactional
18 lawyer, I am kind of curious, what are all those deals
19 -- and this is what Peter is talking about -- going on
20 behind the scenes?

21 I have some questions about whether there is
22 some leveraging of one asset class off another. So
23 one purveyor of social media that has a lot of content
24 can say, well, you get access to this content,
25 third-party data company out there, if you then give

1 me access to something you have. We do some exclusive
2 deals behind the scenes. So that was what I was
3 trying to map again. And FTC is perfectly situated
4 for this, looking at exclusive versus nonexclusive
5 licenses, looking at the classical horizontal versus
6 vertical. Are you tying up markets? Are you tying
7 one sort of commoditized thing to another?

8 MR. OCHOA: So I would like to push back on
9 the notion that consumers are behind the transition
10 from downloading to streaming. I think content
11 providers are largely behind the transition from
12 download to streaming, because they want to get paid
13 on a regular basis every month, rather than giving you
14 something that you can own forever.

15 And I think consumers accept streaming on
16 the basic notion, well, I will be able to access this
17 forever, and then they get really upset when Netflix
18 no longer has access to certain types of works that
19 they previously had been able to have access to. So,
20 you know, I mean, and it goes back to the notion of
21 what does buying something mean? But, basically, I
22 think we have a consumer preference for, you know, I
23 would like to be able to have this forever, and we see
24 notions of ownership just disappearing in a purely
25 streaming society.

1 MS. GILLEN: So I think this is a good time
2 to jump in with our next question, because you have
3 all talked about a lot of sort of the tools that the
4 FTC has and I think much like you said that this is
5 one of the first conversations of antitrust and
6 copyright, this is the first conversation I have had
7 when I have been able to talk about our data broker
8 study and our IP licensing guidelines.

9 I think that one of the things that I am
10 thinking about as you guys are talking is what are our
11 tools? So in the licensing space, we do not
12 traditionally say, here is your license. We say, you
13 parties should engage in your licensing behavior, and
14 here is what you can do to be within the antitrust
15 guidelines. So with that sort of background in mind,
16 I am curious to hear what future solutions you think
17 that the FTC or other government actors can engage in
18 to promote innovation in the copyright space.

19 And we have talked about some of the FTC's
20 tools in looking at our enforcement work, our policy
21 work, and our research opportunities. So are there
22 specific examples of enforcement actions that the FTC
23 should look out for? Do you have suggestions with
24 respect to legislative change?

25 And, Eric, maybe I will start with you.

1 MR. CADY: Sure. Thank you.

2 And just in terms of continuing to innovate
3 from IFTA's perspective, legislative solutions are
4 required to address the problems associated with
5 copyright infringement, especially as it becomes more
6 sophisticated, particularly online. Our enforcement
7 strategies and laws must adapt accordingly.

8 To ensure that copyright law keeps pace with
9 the technological advances, IFTA offers two key
10 legislative changes. The first, to classify
11 large-scale unauthorized streaming as a felony to
12 effectively deter online infringement and provide an
13 important enforcement tool to pursue those who do the
14 most damage to independents and their authorized
15 distributors.

16 So under the current law, streaming and
17 downloading are the exclusive rights of the copyright
18 owner. But they are treated differently in terms of
19 the criminal penalties for the violation of those
20 rights. A violation of the public performance right,
21 streaming, can only be charged as a misdemeanor,
22 whereas an unauthorized downloading, a violation of
23 the exclusive right to reproduce and distribute, may
24 be punished as a felony. This is particularly
25 important in today's marketplace where, as we have

1 learned, streaming is becoming the primary model for
2 how consumers consume audio/visual programming.

3 Second, IFTA would recommend updating the
4 1998 DMCA to provide for notice, takedown, and
5 staydown to incentivize all stakeholders through safe
6 harbor to effectively and rapidly deal with the damage
7 of online infringement, especially in the most
8 egregious cases of prerelease theft where there can be
9 no legitimate copies available online.

10 Today's now common technology is employed by
11 major platforms where they can identify a specific
12 digital file after a copyright owner provides notice
13 of a digitally watermarked or fingerprinted file.
14 They can do it an exact match and ensure that those
15 copies are no longer proliferated online especially on
16 their systems.

17 MS. GILLEN: Thank you. Does anyone else
18 have anything else they would like to add?

19 MR. MENELL: I want to respond to Eric, just
20 because I think he highlights why we have made so
21 little progress in amending the copyright statute,
22 that I have sat through, listened to all of the
23 hearings that the House Judiciary Committee held and
24 each session involved people who were polarized on
25 these issues.

1 And, now, let's just think about what has
2 been said on this panel today. I mean, Peter Jaszi
3 hit the nail on the head. Statutory damages make
4 absolutely no sense in the way they are currently
5 being used. They were designed to help ASCAP go
6 around and police public performances in bars and
7 restaurants and, now, you know, it can create a
8 massive chilling effect on all kinds of players. And
9 what I would say is that we could start having, I
10 think, a conversation that might lead to legislation
11 by just walking towards the middle on all these
12 proposals.

13 I mean, I think staydown makes a lot of
14 sense but not with massive statutory damages. I mean,
15 I know Google and other companies like to say that it
16 costs a lot of money to create these filtering systems
17 that they deploy and that would chill small companies,
18 but, in fact, Audible Magic and other companies
19 license those technologies, and I think the FTC could
20 easily do a study just to show that you do not have to
21 build content ID to create a new service that has
22 peer-to-peer and other capabilities built in, you can
23 license those technologies.

24 But I think, in order to get anywhere, we
25 have to take off the table that you would be

1 potentially hit with extraordinary damages. I mean,
2 small claims court could be a good solution for
3 dealing with some of these issues. But we have to
4 move towards sensible remedies.

5 I mean, look at the Viacom case. I mean,
6 79,000 works times \$150,000, I mean, there is over \$13
7 billion. Now, when I asked the Viacom lawyer, he
8 said, no, we are only asking for a billion. But, in
9 fact, you know, a billion was kind of laughable,
10 because they benefitted from YouTube. I learned about
11 the "The Daily Show" from YouTube and then I started
12 watching it.

13 So I just think that you are exactly right,
14 that the DMCA is out of date. But I would ask you and
15 Keith and others in the industries to just start
16 looking at the middle and try to talk with -- I think
17 Google could easily come to the table if people were
18 willing to put statutory damage and other things out
19 there.

20 So I agree with you that there are problems
21 that are fixable. I think that the problems, though,
22 have to be balanced, and none of the discussions in
23 the public have really tried to do that and I just
24 think that is where we ought to be right now. And I
25 think if this panel were to sit together for dinner,

1 we could probably come up with a really nice solution.

2 (Laughter.)

3 MR. KUPFERSCHMID: If I could jump in here.
4 So I love that last line Peter said, and I just wish
5 it were true. I think if we were to sit down, I think
6 we would go down the line and define the middle. I
7 think we would all have different definitions of what
8 that middle looks like and what it is. And so I would
9 love for that to be the case and would certainly
10 support that.

11 But, you know, I love what Peter said also
12 about the -- you know, the small claims tribunal. We
13 are talking a lot about big guys and big lawsuits
14 here, whether it is the Oracle vs. Google case or the
15 Viacom case or what have you. But I have to admit, I
16 am really concerned about the little guys here.

17 That is why we have been supporting the CASE
18 Act H.R. 3945, which would create a voluntary small
19 claims court in the Copyright Office because it is
20 these little guys that are granted copyright rights
21 but they have no remedies. They have no way of
22 enforcing those rights. And what has happened over
23 time especially over the last decade plus, is that
24 these small creators, these small businesses have
25 become disenfranchised by the copyright system. As a

1 result, they no longer are registering their
2 copyrighted works because it does not make sense.

3 The primary incentive, the primary reason to
4 register your works with the Copyright Office is to be
5 able to sue. And you get a lot of benefits associated
6 with that. But they cannot afford to sue. They
7 cannot afford to hire an attorney and pay the what --
8 on average, I think \$350,000 it costs to litigate a
9 copyright infringement case. So that is a problem.

10 You know, patents and copyrights are
11 indifferent in this regard. You have no rights to
12 your invention until you go and get a patent.
13 Copyright, you have those rights and what you get from
14 registering is the ability to sue, which these little
15 guys cannot do anyway. And so, that has created more
16 sort of a ripple effect, because these small creators
17 are not registering that the Copyright Office's
18 database is becoming incomplete, if you will. It is
19 made up of all the big companies and the big
20 organizations and the big creators who can afford to
21 register on a regular basis or at least register more
22 easily.

23 And the problem is you have people who are
24 looking toward that ownership database to try to
25 license copyrighted works and that hurts both commerce

1 and competition. And so for that reason, we think the
2 CASE Act that would create this small claims tribunal
3 in the Copyright Office would be a huge step forward.
4 It is not going to solve all the problems, but it
5 would solve a lot and it would give these creators,
6 who are disenfranchised now, it would give them some
7 faith in the system and they would begin to start
8 registering once again.

9 So I also just want to just reiterate what
10 Eric said also about the idea about this disconnect
11 between willful, egregious acts of downloading being a
12 felony under the law, but when it comes to streaming,
13 which is where the new business models are certainly
14 moving, if not have already moved, it is simply just a
15 misdemeanor. And that just does not make sense. The
16 law has not kept up.

17 Criminal penalties for copyright
18 infringement should not differ depending on whether a
19 work is made available to the public to download or to
20 stream. And given the popularity of streaming,
21 misdemeanor penalties are simply not sufficient to
22 deter those large-scale infringers. The IPEC has
23 supported legislation to fix this problem and we
24 support the IPEC in that regard.

25 MS. ROSE: And I just want to jump in with a

1 comparatively very small fix that I would like to
2 suggest, which is -- and I believe this would take
3 some legislative action to formalize, but in the
4 triennial 1201 anticircumvention exemption hearings
5 that the Copyright Office offers. They currently do
6 it in consultation with NTIA. But over the last few
7 rounds, we have seen more and more issues of
8 competition and downstream commerce control coming
9 up.

10 And I would like to see the FTC become
11 involved in that process, if nothing else, you know,
12 through either the availability of a formal referral
13 mechanism or something similar to that, because as I
14 said, as we see more and more softwares embedded in
15 objects, we have seen more and more instances of
16 companies using 1201 to impact other areas of commerce
17 outside of the initial production. And I would like
18 to see the FTC have some kind of role in helping to
19 consider those questions.

20 MR. JASZI: If I could mention -- I think
21 that is a terrific idea. I would mention two other
22 areas in which it seems to me that an attempt to come
23 to the middle of the one of the kind that Peter
24 describes would be interesting. And one is, in fact,
25 this discussion of small claims tribunals that Keith

1 has mentioned already. It has tremendous appeal and
2 obvious advantages.

3 And, at the same time, I think those are --
4 there are those of us who are concerned that a small
5 claims trial format might not be one in which the full
6 range of defenses and exceptions available to
7 copyright defendants could be easily or successfully
8 invoked. So rather than line up for or against the
9 small claims tribunal format, it might be interesting
10 to actually talk candidly about those competing aims
11 and those conflicting anxieties.

12 An area in which legislation would certainly
13 be necessary, but which I think is worthy of
14 discussion now in light of all of the talk that we
15 have had today about licensing, is the question of
16 whether or not there are any consumer freedoms that
17 are historically associated with copyright law that
18 should not be waivable in an end user licensing
19 agreement. Should the fair use doctrine be waivable
20 in gross in an agreement, for example?

21 And that, I think, again, it is a tough
22 discussion, but it is not actually a binary question.
23 It is one in which there may be a middle ground and it
24 would be an interesting conversation to see if it
25 could be arrived at.

1 MR. O'CONNOR: So I will be a little bit of
2 an outlier and just say I think -- and this is obvious
3 to the FTC, I think. You know, the jurisdictional
4 issue really is -- I think that we are kind of varying
5 on this panel now at the moment to talking about
6 substantive copyright law, which would be a great
7 other panel, and we could really take a lot of time
8 on.

9 I am refraining from doing that just because
10 I think the FTC has been in its most helpful over the
11 years to me as transactional lawyer with the
12 guidelines about what is appropriate for licensing.
13 You know, I remember things where I am more on the
14 patent side, but if you, you know, you license someone
15 a patent and then you do not have to -- you are not
16 obligated to grant back any of the inventions that you
17 come up with. So this may get less exciting in some
18 ways and less sexy, but this is the stuff that is
19 incredibly important.

20 I will toss out a couple of ideas again,
21 this notion of maybe thinking about issuing
22 guidelines, discouraging these what I will call the
23 perpetual licenses with vague assignment sublicensing
24 provisions. That is what lets everything just go
25 perpetually through the data networks and lets you

1 lose control of your stuff.

2 I think that it is incredibly important to
3 maybe issue some guidelines about enforceable, private
4 public zones. I said this at the beginning, but let
5 me make it more clear what I mean from that. A lot of
6 us feel like we have been told that we have a private
7 zone where we can just put our content up available
8 only to a closed network of friends and associates,
9 and then lo and behold, it gets disclosed much more
10 than broadly. That is a problem, I think. And this
11 goes, in some ways, to the heart of contracts
12 themselves. Are you getting what you thought you were
13 getting?

14 MR. OCHOA: In terms of what the FTC can do
15 in enforcement, I think perhaps the single-most useful
16 thing the FTC could do was what Meredith talked about
17 with regard to embedded software, is trying to use the
18 embedded software in a device to give you exclusive
19 rights to be the one to repair or fix or service that
20 device. That is a recurring problem. Section 117(c)
21 was designed to address that in part, but it has not
22 solved the problem because of 1201.

23 That is just an obvious antitrust violation;
24 it is an obvious tying arrangement. And just to
25 ensure that because there is software in a device, you

1 know, does not mean that you can prohibit other people
2 from being able to service the device.

3 MS. GILLEN: So switching gears just a bit,
4 Peter Jaszi mentioned the importance of a doctrine of
5 copyright misuse and we would be interested in hearing
6 whether you have any examples of copyright misuse and
7 how the law would apply and maybe other panelists have
8 examples as well.

9 MR. OCHOA: Well, I do think repair of
10 devices with embedded software is the classic example
11 of copyright misuse that could be addressed by the
12 FTC. Another one we see in the Disney/Redbox
13 situation, tying a digital copy to ownership of a
14 physical copy, where they should be able to be
15 transacted separately.

16 MR. KUPFERSCHMID: So on the issue of -- I
17 do not want to go too deep on this, but on the issue
18 of embedded software, I mean, that is an issue that
19 has come up at the Copyright Office in the context of
20 their Section 1201 rulemaking. I know that they are
21 scheduled to come out with a new rulemaking decision I
22 think either later this week or next week or sometime
23 very soon. So, at best, it is sort of premature, I
24 think, to talk about these issues, because this
25 process, the rulemaking process, is an evolving

1 process.

2 And the Copyright Office has certainly tried
3 to make it easier for those who are seeking
4 exceptions, things like automatic renewals and things
5 like that, and I think certainly there are a
6 collection of statutory exemptions in 1201, as well as
7 the triennial rulemaking exceptions that ensure that
8 the 1201 process does not sweep too broadly. So it is
9 very likely that these issues may be sort of
10 nonissues, if you will, moving forward.

11 MR. MENELL: That may be true, but I would
12 also remind the FTC that they played a tremendous
13 countervailing force in the patent field, that the
14 Patent Office is a little more sort of focused on the
15 property rights orientation just as the Copyright
16 Office may be inclined and because of the competition
17 overlap going back to the mid-'90s and certainly
18 through the whole battle over patents, I think the FTC
19 is now, in my view, a very important player, a
20 counterbalancing player.

21 So just having a way of interacting with the
22 Copyright Office and being able to provide guidance on
23 what you see, because they see different parts of the
24 elephant, you see different parts. And in that sort
25 of combination, we get a better overall balance in our

1 law.

2 MR. JASZI: If I might, I would second what
3 Tyler had to say about the potential importance of the
4 Redbox case, which is, of course, ongoing. With
5 respect to the future of copyright misuse, because the
6 district court's interpretation of the doctrine in
7 that case is a broad rather than a narrow one, it is
8 not limited to the kinds of tying of situations that
9 have been the classic locus of the doctrine. And it
10 bites specifically on this question of unreasonable
11 contractual limitations on consumer expectations with
12 respect to licensed goods. That is the very essence
13 of the district court's attack in the Redbox case.

14 Now, what will survive as the case
15 progresses is a different question, but it is not too
16 soon, I think, to begin investigating from an
17 enforcement perspective whether the vision of
18 copyright misuse that the Redbox court articulates is
19 one that should be pursued.

20 MR. O'CONNOR: I think two issues. One,
21 with the embedded software, that is, again, I think
22 just a topic that is really much bigger than we could
23 do today. I think if the FTC wants to get serious
24 about that, it has to do a whole panel session on
25 thinking about that. It is a really deep issue.

1 On Redbox, I think -- and sometimes I will
2 sound like I am going in two directions, but I am a
3 big fan of innovative business models, and I think
4 that, you know, we do have to be careful about when we
5 are looking at Disney providing content and basically
6 saying, well, look, here is a way you can get two
7 things of content at one bite.

8 It goes back to this lease license model, I
9 said that has been around for a long time. You lease,
10 or essentially convey, under an impermanent basis some
11 physical object and then you give some license rights.
12 So it is not really that different than what has gone
13 on before. So the question is whether people can just
14 try to circumvent that. So I think that is an issue
15 that we need to be careful about.

16 MR. MENELL: Yeah, we have come through this
17 digital revolution. It is obviously going to
18 continue, but, you know, many of us on this panel grew
19 up in an era where we owned records. We joined record
20 clubs, which is a thing of the past. And for my kids,
21 I did not want them growing up pirating. So we did
22 iTunes. We spent a fortune on iTunes. And, now, we
23 do not touch our iTunes and we do not care about our
24 iTunes because we are all on Spotify.

25 And I do not think it is necessarily a wrong

1 thing to -- you know, Spotify will evolve. There are
2 obviously going to be important governance issues in
3 how that platform works. But the beautiful thing that
4 it has brought about is that younger people are not
5 viewing music as free anymore. They are joining
6 services. They are participating in the market. And
7 the celestial jukebox is starting to work as we had
8 all hoped.

9 And also the data side is pretty good
10 because you get paid based on how people are using
11 music rather than just some kind of, you know, Nielsen
12 or other method. I mean, you have actual good data,
13 and I think, for people growing up today, the main
14 problem, though, in that market, as I have tried to
15 communicate, is that the major record companies are
16 able to dictate the terms on which money is
17 distributed, because no one would join Spotify without
18 having access to the full catalog of the major record
19 labels.

20 So universality, I think, in music is a very
21 important feature of an ideal system. But I think as
22 with the Music Modernization Act and other things, we
23 are starting to view this as less of a free market, as
24 more of a regulated market, but we could go back to
25 the goals of the original copyright world, which is

1 that we want that money to flow in a balanced way to
2 the creators. So that is a sense in which I hope the
3 Copyright Alliance would support me. And I worry that
4 because of the legacy catalog, the major control in
5 that space is still dictated by three or four music
6 labels.

7 And how that -- you know, they have -- Sony,
8 for example, is giving some of the money that they
9 earn from the Spotify IPO to artists. But I think
10 sort of trying -- for me, that is the health of a
11 copyright system, is money getting to the creators in
12 proportion to value. And it used to be the record
13 companies did a lot of value. They do not do it
14 anymore. And, yet, they dictate the terms on which an
15 independent artist comes in to Spotify. So it is a
16 very big issue.

17 But I think the film side, what Eric's
18 talking about, is actually a different market. And I
19 was interested to hear how he viewed some of those
20 issues. He is worried about Netflix, but in some ways
21 Netflix and HBO and the other companies are creating
22 competition for his clients' products. And so making
23 sure that market worked well could be very good for
24 filmmakers.

25 And I see the world as being -- you know,

1 copyright is not monolithic and so we have to look in
2 these pockets. But music, I think, has improved
3 dramatically in the last five years. Film and
4 television is getting better, long-form content.
5 There are a lot more people producing very valuable
6 stuff that people are paying for. But I think being
7 aware of how network effects are going to continue to
8 operate in these fields and how power is allocated is
9 ultimately going to determine how well the copyright
10 system functions, how well money gets down to people
11 who create things that other people value.

12 MS. ROSE: To sort of piggyback on that, you
13 know, holding up the music industry, I think, it is
14 certainly not a determinative example, but possibly an
15 illustrative one. The music industry is governed
16 largely by highly opaque contracts. Nondisclosure
17 agreements are pretty endemic within the industry.
18 And so this leads to asymmetries of information all
19 around.

20 And I cannot speak for artists as someone
21 who is not one myself. I will name-check groups like
22 Future Music Coalition which does a lot of work on
23 this. And that the money flows are intensely opaque.
24 The amount of money that given streaming services pay
25 out to record labels is opaque and, frequently, the

1 existence of a nondisclosure agreement is a
2 precondition for any record label who wants to enter
3 into these contracts. And so, these things are
4 purposefully obfuscated.

5 This can create problems on the artist end
6 with asymmetry of information about what compensation
7 rates are among artists. And one of the places we see
8 this most endemically is in the exercise of
9 termination rights, which are the statutory rights
10 that were made available. They were created in 1978.
11 And essentially what they are is the ability of an
12 artist to revoke a license that they have issued for
13 use of their creative work 35 years after that initial
14 license was issued.

15 The first batch of these really became ripe
16 in 2013 en masse and everyone kind of held their
17 collective breath to see what would happen, and it was
18 a big fizzle. There has not been much successful
19 exercise of these termination rights. And the
20 attempts to exercise them have largely been litigated,
21 and they have been settled under nondisclosure
22 agreements.

23 So there is this sort of endemic use among
24 the industry. And while this is not necessarily --
25 this is partly a problem tied to copyright because

1 termination rights are tied to copyright, I think a
2 lot of the problems we have had in systemically
3 addressing inequities that stem from these industries
4 has been tied up in this truly amazingly pervasive use
5 of nondisclosure agreements and lack of information
6 flows.

7 And it makes it very difficult not only just
8 as someone who is curious about the market, but it
9 makes it extremely difficult for policymakers to craft
10 any meaningful policy around these issues, especially
11 when you are relying purely on self-reported numbers
12 coming from major industry players who have their own
13 interests disturbed by crafting the data that they
14 give you.

15 MS. GILLEN: Thank you. And, unfortunately,
16 we are running short on time. I think we have time
17 for everyone to make some final remarks.

18 Eric?

19 MR. CADY: Sure. So I think I would just
20 add a reminder here that content fuels much of the
21 platform innovation that we have discussed today and
22 would reiterate that, as a matter of public policy
23 that consumer interests requires wide access to an
24 ongoing supply of the creative content from major
25 blockbuster films to the diverse and unexpected

1 productions from the independents.

2 The unfortunate commercial reality here is
3 that a few major online platforms and distributors of
4 content hold market power that is unbalanced to the
5 detriment of program suppliers and consumers. This
6 reality, combined with a lack of meaningful platform
7 responsibility to avoid illegal content, means that
8 the FTC must be even more vigilant in its efforts with
9 respect to competition, consumer protection and their
10 relation to the copyright law and we urge the FTC to
11 make legislative recommendations in that area.

12 IFTA looks forward to continuing its
13 participation on these important issues. So thank
14 you.

15 MS. ROSE: Yeah, I think I just want to
16 reiterate fundamentally consumer well-being and
17 consumer freedom is not just tied to freedom to access
18 and consume content. It is tied to certain statutory
19 limitations and exceptions in copyrights. It is tied
20 to certain freedoms to not only consume content
21 passively, but to use content in forms of commentary
22 parity, transformative natures.

23 And I think we tend to lose sight of that,
24 that while the market has grown to accommodate passive
25 consumption quite nimbly and quite pervasively, the

1 tradeoff has been that we have started to lose the
2 immediate ability to exercise these other consumer
3 rights that have been enshrined in the law.

4 And the place where -- you know, again, I
5 come back to harping on it -- the place where we run
6 into this perhaps most frequently is in the very
7 fundamental concepts of ownership and how those have
8 been undergoing or not undergoing a paradigm shift by
9 the pervasion of consumer-embedded software.

10 So I thank the FTC for holding the panel and
11 also for inviting public knowledge, having consumer
12 voices on it and, hopefully, I look forward to seeing
13 where your inquiries lead you.

14 MR. O'CONNOR: So in my final remarks, I
15 would just say -- I would reiterate again that free
16 and fair competitive markets -- goodly competitive
17 markets for creative works are based on strong
18 property rights. We start there, and then people move
19 into the market. It is unfair if people have to
20 negotiate against free. So I think we could spend a
21 lot more time on the music industry where things are
22 just -- if it is available for free out there, then
23 you may freely come to a negotiation, but that is
24 because you are competing against yourself in the
25 rates that you are trying to set.

1 I think the transparency is something I
2 think we all might agree on on the panel, that there
3 needs to be more transparency across this, especially
4 with the data and what I am calling these kind of back
5 behind-the-scenes business-to-business deals that are
6 going on.

7 And then, finally, just once again, I think
8 this is a great time for the FTC to continue its
9 research and issue some updated guidelines,
10 particularly for how content is used in this new
11 digital age.

12 MR. JASZI: I think one pretty clear point
13 of consensus on the panel is that one measure of the
14 health of a copyright system is the transparently
15 available evidence of the meaningful flow of economic
16 returns back to individual creators. But that is not
17 the only measure of the health of a copyright system,
18 as Meredith has suggested.

19 The longer term health of a copyright
20 system, the ability of a copyright system to fulfill
21 the purpose of promoting the kinds of cultural
22 progress to which Article 1, Section 8, Clause 8
23 refers depends also on mechanisms both in the law and
24 in practice around the law to assure the continuation
25 of consumer freedom to recreate. And that, I think,

1 is where the new business models, the limited access
2 models wrapped in end user license agreements most
3 threaten the health of our copyright system going
4 forward.

5 MR. OCHOA: I think I would just like to
6 point out that we have to be very careful because
7 copyright owners are not monolithic. There are just
8 lots and lots of different types of copyright owners,
9 ranging from so you have a lot of the people that just
10 want to post stuff on social media and on YouTube.
11 Individuals who create content, own copyrights in
12 their content, they are primarily interested in
13 credit. They are not primarily interested in money,
14 but they do not want to be taken advantage of if their
15 stuff is being used commercially. They would like a
16 share of it.

17 Then you have individual creators that are
18 trying to do it for a living, that are trying to --
19 individual photographers that want to be able to make
20 a living from doing photographs, perhaps individual
21 songwriters or singers that want to be able to make a
22 living from their songs or their performances. And as
23 Peter said, they have to live in a world where the
24 rules are largely dictated by the large corporate
25 copyright owners, the four major record labels make

1 the rules for the music industry, and people who want
2 to make money in that space have to live by those
3 rules.

4 Photographers, you know Corvus and Getty
5 make the rules for the photography industry and other
6 people have to live by those. So trying to correct
7 that imbalance of power between small individual
8 copyright owners and large corporate copyright owners
9 might be a useful focus.

10 MR. KUPFERSCHMID: So this is supposed to be
11 a survey panel. We certainly did do a survey. We
12 covered a whole bunch of different issues. I know we
13 are going to be filing written comments and so it is
14 just not possible to address all the issues that came
15 up here today on the panel.

16 But I do want to talk about one since there
17 seems to be a theme running down the table here about
18 the health of the copyright system, and with regard to
19 the health of the copyright system, what really has
20 not been focused on enough here is the adverse effects
21 that piracy has on competition. And I am going to
22 give one example here or maybe two and try to it
23 pretty quickly.

24 But in three months in 2015, Disney sent
25 35,000 takedown notices directed to illegal copyrights

1 of Avengers: Age of Ultron, which was still in the
2 theaters at the time. Those were sent to one single
3 site. That is more than 10,000 notices a month, more
4 than 300 in a day directed at a single movie on a
5 single file hosting site. Similarly, over a
6 three-month period in the spring of 2015, Fox sent
7 more than 57,000 takedown notices to a single file
8 hosting site for the film, Kingsman: The Secret
9 Service. That is 19,000 notices a month to one site
10 for the same movie.

11 If the DMCA was working as intended, one
12 would expect the notices to the site to decrease over
13 time. Yet, we see the opposite. For instance, in the
14 Kingsman example, on April 30th, Fox sent 697 takedown
15 notices. On July 21st, three months later, it had to
16 send 881 notices to the same site for the exact same
17 work. In no universe, whether it is the Marvel
18 universe or any other universe, is this an effective
19 way to deal with piracy. This is just not a healthy
20 system from the piracy standpoint and something needs
21 to be done.

22 I am not suggesting legislative change, but
23 perhaps we are a big supporter of voluntary
24 initiatives and voluntary measures to promote
25 competition and protect consumers and we would

1 certainly support the FTC playing a role in that.

2 MR. MENELL: I see we are at the end of our
3 time. I will just say that this was a great
4 beginning, a great first date, and I hope there are
5 many more.

6 (Laughter.)

7 MS. GILLEN: Thank you. Yes, I think it has
8 been a productive discussion, and please join me in
9 thanking all of the panelists.

10 (Applause.)

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1 CLOSING REMARKS

2 MS. MUNCK: So since I am already sitting
3 here, I will do the closing remarks from here instead
4 of standing up. But I just want to give thanks to
5 Elizabeth and John for their moderation today. Thanks
6 to the panelists for covering almost every issue in
7 intellectual property and copyright law.

8 You have clearly given us a lot of work to
9 do in terms of going back and digesting the transcript
10 and understanding what we have learned, both today as
11 we prepare for tomorrow when we will begin at 9:00
12 a.m. with Drew Hirshfeld, the Commissioner for
13 Patents, looking at patent quality, patent litigation,
14 trade association issues, and economic issues, closing
15 with Commissioner Slaughter's closing remarks.

16 So both in preparing for tomorrow, but also
17 in preparing for what we are going to do going forward
18 and I am very happy with our inaugural copyright panel
19 and I hope that we will be able to continue to work
20 together.

21 Thank you. And thank you, everyone. Have a
22 good evening.

23 (Applause.)

24 (Hearing concluded.)

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