UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT PUBLIC ADVISORY COMMITTEE MEETING

QUARTERLY MEETING

Alexandria, Virginia

Thursday, November 19, 2020

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P R O C E E D I N G S

(11:05 a.m.)

MS. MAR-SPINOLA: Okay, good morning, everyone. This is Julie Mar-Spinola. Welcome to our fourth quarterly meeting of the year, also our last year. I appreciate everybody's attendance, and I welcome everybody. I'm going to be brief this morning because we have a lot to cover. We've had definitely a challenging, but productive year. And you're going to hear a lot of great things about that. We will be discussing aspects of our annual report that will be published soon. And then move forward to talking about what we foresee for next year, 2021.

First, if I may, I'd like to introduce the PPAC members. There's Barney Cassidy, who is a chair of AI Subcommittee. Dan Lang, chair of the Finance Subcommittee. Jeff Sears, chair of the PTAB Subcommittee -- pardon me. And then Jennifer Camacho, chair of the Innovation Expansion Subcommittee. Jeremiah Chan, co-chair of the AI Subcommittee with Barney Cassidy. Mark

Goodson, chair of the IT Subcommittee. Steven Caltrider, chair of the Pendency Quality Subcommittee. Tracy-Gene Durkin, who is our chair of the International Subcommittee. And in addition, we have our union reps, Catherine Faint and Kathleen Duda with us.

So, with that, I'd like to turn it over to the Director Andrei Iancu. Good morning.

MR. IANCU: Okay, good morning, Julie. Just to be sure, you can hear me, right, Julie?

MS. MAR-SPINOLA: I can hear you loud and clear. Thank you. I can't see you. There you are. All right.

MR. IANCU: Okay. Okay, well, you're not missing much if you cannot see me. But at least you can hear me, that's the key. Well, thank you very much. And good morning, everyone. And it's so good to see all of you. Although, once again, we are virtual. We've been virtual for most of this year as everybody knows. But in any event, I hope that you, your loved ones, and everybody surrounding you is in good health and

that you stay safe throughout the upcoming holidays.

PPAC members and those watching, you have a full day ahead of you. And, we really do appreciate that you are devoting so much valuable time to such an important and worthy cause. Our IP system is more important now than ever. Indeed, our IP system has created a foundation upon which researchers and scientists and engineers are doing so much good work to help address this pandemic to develop vaccines and therapeutics and PPE and ventilators and everything else that the United States needs, as well as the rest of the world.

Let me give you an overview of our operations here at the USPTO over the last few months since we have last met. As you know, almost all of our employees continue to telework. And despite all that, remarkably, their productivity continues to improve. A true testament to the incredible dedication of our public servants at the USPTO. All of our hearings

and examiner interviews are being conducted virtually. We remain in Phase One of operations at our Alexandria headquarters, as well as the four regional offices. This means that our buildings are still closed to the public, but a few employees can come into the offices as needed. Given the latest trends in the pandemic we're seeing throughout the country, it appears that we will remain in Phase One for the immediate future. Ultimately, the health and safety of our employees and the continuity of operations remain our top priorities.

As everyone now knows, we shifted to full-time telework back in mid-March or so. It has been a seamless transition made possible by the herculean efforts of the PTO IT team. They have been working around the clock, literally, to ensure our infrastructure is operating at its peak and supporting our vast operations.

Like the rest of the country and our economy, filings at the USPTO were impacted by the pandemic. Serialized patent filings increased by

0.7 percent in the 2020 fiscal year, which just ended in September 2020. But this slight increase was lower than the planned 2 1/2 percent. Virtually all of the growth was driven by filings from China with an increase of 19.3 percent and South Korea with an increase of 16.6 percent. Filings from virtually all other nations, including those from the United States, were down last fiscal year. Nonetheless, small and micro entity patent filings and patent grants were at the historic high in fiscal year 2020.

Requests for continued examination filings decreased by 9 percent last year. This is a reversal from the 0.4 percent increase in fiscal year 2019 and it signifies less demand for rework. Meanwhile, provisional patent application filings have increased by 2.9 percent. And design filings increased by 4.2 percent, a reversal from 2019, when they declined by 0.4 percent.

On the trademark side, just so folks on the PPAC know and keep an eye on the other side of operations, so, on the trademark side, original

filings are booming, setting a new record last year with an increase of more than 9 percent. This is despite a sharp decrease that occurred earlier in the year at the start of the pandemic in the United States. And, it illustrates a typical and rather sharp V-shaped recovery. As usual, trademark filings are closely coordinated with the overall economy. Patent filings on the other hand, are a lagging indicator and usually trail overall economic performance by several months or longer. This is why it is unsurprising that we are now seeing declines in patent filings.

Late stage maintenance fee renewal rates have also been sliding even before the pandemic. By the way, on the trademark side and in contrast with original filings on the trademark side, trademark renewals have also been lower than expected and our projected to create a $12.3 million under collection. Again, that's just for reference.

In other news, we recently released two major reports on artificial intelligence (AI).

The Office has been very busy on a AI both with respect to our own use of AI at the USPTO for operations, as well as in AI policy from an IP point of view in the United States. You'll hear a lot more about those various issues later during the meeting throughout the day.

In the most recent AI report, we found a tremendous increase in patent applications filed that relate in some manner to artificial intelligence. For example, there was 100 percent increase in AI patent applications from 2002 to 2018. Patent applications containing AI grew from 9 percent to nearly 16 percent. We also found that AI patent recipients are geographically-disbursed, and that inventor-patentees in this field increased from 1 percent in 1976 to 25 percent in 2018. In the other AI report issued this past summer, we synthesized hundreds of public comments we received on questions regarding IP policy surrounding AI and machine learning technologies. We found there was agreement among our

stakeholders that current IP laws didn't generally address issues associated with AI patenting in an adequate fashion. Comments received also confirmed the legal standard that only a natural person or a company should be considered in their view, the owner of a patent or invention. But the public urge continued attention to all of these issues. And that's exactly what we will be doing and are doing.

We have also made tremendous progress with the use of AI tools in our own processes here at the USPTO. For instance, in the AI report that I just mentioned, we actually used AI to identify AI patents. In other words, our researchers developed their own artificial intelligence program to look through the vast databases of patents since 1976 to identify which of those patents contained AI. But we are using AI tools in so many more applications. We are developing, for example, AI technologies to help us with classification, with prior art searching, with image location, and the like. Again, you will

hear a lot more about all of these efforts throughout the day.

On the trademark side too, again, just to keep an eye on the other side of the business operations, AI tools are being deployed to identify fraudulent specimens and reduce the unauthorized use of trademarks. We are also, by the way, using embedded AI systems to provide the public with access to our highest value databases. AI is an exciting and dynamic technology that will have a tremendous impact on the USPTO and on the entire society. This is a work in progress at the USPTO as it is in the rest of the nation, and we will stay very much on top of it as an office. But also, importantly, as a country, it is imperative that we be on the forefront of its development.

By the way, on this issue, we are also honored by having one of our top executives receive the year's Washington Executive Pinnacle Award. Last week, Chief Information Officer Jamie Holcombe took home the top prize as Artificial

Intelligence Government Executive of the Year. For Jamie, it is a true achievement, and we offer him our highest congratulations. So well deserved. But, it is also a great benchmark for the amount of progress we have made in just a few years in modernizing our IT systems and great kudos goes to Jamie's entire team at the USPTO. He and the entire CIO team have been working to create fully redundant systems for the USPTO, among many other improvements.

We have been working to move various operations to the Cloud and to multiple data farms, and so much more. Again, you will hear a lot this throughout the day. I am so proud to say that we have come a long way in a short amount of time. It is a tremendous accomplishment for the USPTO and for everyone involved in the American IT ecosystem. But as I've said, much work remains to be done and improvements to our IT infrastructure continue and will continue on a daily basis.

At our last quarterly meeting in August, I also talked about changes in examination time,

application routing, and the new examiner performance appraisal plan for the patents organization. I am happy to report that these were implemented starting at the beginning of the new fiscal year in October. To fully implement them, we are developing new IT tools, engaging in extensive training, and creating a communications infrastructure to ensure that patent examiners and stakeholders can adopt to the changes. We expect them to substantially improve the examination process. And you will hear more from it -- on these issues from Commissioner Hirshfeld in just a little while.

This past October, we also implemented the reorganization of our patents operations. The intent is for senior management to integrate examination and non-examination groups across our deputy commissioners' areas of responsibility. This will foster teamwork and the sharing of diverse perspectives. It will facilitate cross-training of the management staff and provide increased career development paths for our

employees. And it will balance the number of employees within the reporting chains of each of our deputy commissioners.

Meanwhile, at the Patent Trial and Appeals Board, we continue to improve every aspect of operations as well. Our PTAB judges have reduced the ex parte appeal backlog from 21,000 appeals in 2015 to about 7,500 by the end of 2020. In addition, the average pendency of ex parte appeals dropped by 11 percent this year from 15 months in 2019 to 13.4 months in 2020. By the way, all this taking place during the year which included the pandemic. And by the way, also, this is down from about 30 months in 2015. As an aside on the patent side of the operations, we reduced overall pendency also in 2020 to 23.3 months. This is down from last year's 23.8 months.

Back to the PTAB. We have made great strides over the past three years also to bring balance to AIA trials. We have done this by closing loopholes that allowed repeated challenges to the same patents. We have also adopted the

claim construction standards that is consistent with the district courts and a stronger amendment process.

In the end, IPRs are meant to be a faster, cheaper alternative to district court litigation, and not a tool for repetitive attacks on a patent. To quote from the 2011 House Report on the AIA, IPRs are not meant to be used as tools for harassment, as a means to prevent market entry through repeated litigation, and administrative attack on the validity of a patent. Instead, IPRs are meant to be a cheaper, faster alternative to district court litigation.

We recently issued a request for comments in the Federal Register on proposed changes on instituting trials in situations involving serial petitions, parallel petitions, and proceedings in other tribunals relating to the same patent. We have already received many comments, and if you have an opinion on this issue, I recommend that you share it with us. You will have time to do so since we've just extended

the deadline for those comments to December 3rd. Again, the goal is to further balance the system and to that end, we very much want to hear from the public so that we have a system that is fair to petitioners and to patent owners alike.

In other news, this week we welcomed the arrival of our new General Counsel David Burden, who joined the USPTO just this past Monday. He's a welcome addition to our team. David is a West Point grad with a BS in Engineering. He received his JD from Drake University School of Law, and he has an impressive resume in the field of IP law previously serving as both IP counsel and general counsel in industry. He is also a decorated combat veteran.

Since our last meeting together, we also had a very successful launch of the National Council for Expanding American Innovation, NCEAI. Its members have expressed an incredible desire to broaden involvement in the innovation economy. As I have been saying for quite some time now, we need to expand the innovation entrepreneurship and

intellectual property ecospheres demographically, geographically, and economically. And, this is no idle exercise for so many reasons, but here is one. Expanding the ecosystem enough to quadruple the rate of U.S. Innovation in the United States according to one study can increase U.S. GDP by $1 trillion a year, and there's so many other benefits.

We all know that the creation of IP is the foundation for the growth of individuals, communities, and the nation. As I often say, innovation can be a great equalizer. The members of NCEAI will help us develop a comprehensive national strategy through increased participation in our innovation ecosystem by encouraging, empowering, and supporting all future inventors and entrepreneurs.

We plan to issue a Federal Register notice in the coming weeks seeking ideas from the public on how we can achieve this goal. Again, I encourage all of you to provide the Council with your ideas for policies and programs. Please

visit the NCEAI webpage at USPTO.gov to see who is on the Council and to read their remarks from the inaugural meeting on September 24th. They are truly inspirational.

In conclusion, I want to thank all of you, all members of the PPAC, for all you do to support the USPTO and the IP ecosystem. And now a special thank you to Mark Goodson and Dan Lang for your service as members of PPAC. You have both served two full terms for a total of six years. And thank you also to Steve Caltrider for joining the committee when we had an unexpected vacancy a couple of years ago. Steve is completing his partial -- that partial first term. In recognition for your service, all three of you, we have Certificates of Appreciation. Unfortunately, well, if we were in person, I would now get up and hand you one and shake hands and take a very lovely picture. It's very hard to do that remotely, but at least we can show the certificates. So, Patrick, if you don't mind? Here is the certificate for Dan Lang. Thank you,

Dan.

MR. LANG: Thank you very much. It's been a pleasure to serve.

MR. IANCU: And here is the certificate for Mark Goodson. Thank you, Mark, for your service as well. And here is the certificate for Steve.

MR. CALTRIDER: Thank you.

MR. IANCU: Thank you all for your service to the USPTO, to the IP and innovation ecosystem, and to the United States. We will be sure to send you the hard copies shortly. And to all members of the PPAC, congratulations on completing the annual report. We know how hard you have worked to finalize it.

I want to thank each and every one of you for your service to the USPTO. The IP system is in constant state of change. And your guidance is essential to our continued success. Well, this is our last meeting of the year. And I want to take this opportunity to wish all of you and your families and your loved ones a very happy,

healthy, and safe holiday season. Thank you all.

MS. MAR-SPINOLA: Thank you, Director Iancu. We very much appreciate it. You know, everyone is going to hear today about notwithstanding the challenges that we received this year, everyone, the Patent Office was very productive, and we'll be talking about the details soon. But, we do appreciate everything that you have done and served. We wanted especially to be able to emphasize the areas that we think will carry the PTAB -- or, sorry, the PPAC into the future and to continue to take the lead on its role in the domestic and global economy. And I think it will be your legacy in terms of our introduction of artificial intelligence, all the exciting things that we're going to hear about. So, even at the early stages, how well it's performing and the breath of its applicability in the near future.

And then, of course, another very important subcommittee that we wanted to expand on PPAC was the innovation expansions to promote

diversity of our inventors because we know there are not only more inventors and innovators in our citizenship, but we know that there's more variety and more diversity that have remained untapped. So, with all the programs and the initiatives that under your leadership that the Patent Office is developing and building and will continue to build, we are confident that the diversity of our innovators will be showing up in large numbers. So, we appreciate that.

And we also know that you have put in quite a bit of time into our students, whether from -- I think we're going to hear as young as three and four years old to college. So, we are very thankful that you have reached out personally along with the Patent Office to help educate, but also to add intellectual property and innovation as part of our culture, broader culture. So, thank you for that.

I'm going to open this up to the panel and to the Board to ask the Director any questions they may have. Oh, and if I see the hand feature,

you can raise your hand or just go ahead and speak.

MR. SEARS: Hi, Julie, this Jeff Sears. I have a question for the Director. Director, I just wanted to extend my thanks to you and your office for the great work you've done over the past year, especially in these challenging times. And I just wanted to note a special appreciation for the reductions in pendency across examination and ex parte appeals. Shortened pendency and a quick path to an issued patent or an appeal decision is really essential for commercialization of university technologies. And, I wanted to acknowledge the great work. Thank you very much.

MR. IANCU: Well, thank you. And, really, great thanks and all the appreciation goes to the examiners and in the patents organization and the judges at the PTAB who through all the difficulties that we're all experiencing in the pandemic, all the added burdens of working from home, having to deal with children studying from home, and all the other various health issues

around us that their productivity didn't at all go down. If anything, it went up. And to see reductions in pendency during a year where half of it, at least, was in a full telework situation, is remarkable. So, I am extremely impressed with the performance of our employees and all the credit goes to them. Thank you, Jeff, for the comments.

MR. CHAN: Hi, Director, this is Jeremiah Chan. Thank you for your remarks. I thought you did a really nice job highlighting many of the wins that the USPTO has had in the recent period. You talked about and, I think, provided some well-deserved kudos to your team, particularly the IT team around helping the USPTO really not skip a beat when the pandemic has hit and continued operations, continued to deliver great results.

One question I had was given -- and the PPAC has seen first hand how effective this has been -- given the excellent performance and the ability to adapt, have other federal agencies reached out to you, you and your organization, for

lessons learned, the ability to adapt, the IT infrastructure, all the things that come with being able to get through this pandemic in an effective way?

MR. IANCU: Well, first of all, thanks, Jeremiah, for the kind comments. The IT team has done an amazing job. Really, just as you've said and I mentioned in my opening remarks, but I just want to emphasize, to transition 13,000 people to full telework literally overnight is a remarkable feat. Even though, obviously, the PTO has had long experience with telework even before the pandemic, still the increase in the number of VPN connections on a daily basis has more than doubled, you know, and at various times. To give out, to distribute the network hardware needed to the employees to work in this, they did a remarkable job. And, you know, I think all the kudos go to Jamie and his team, our CIO.

On the question of AI, I do think we are a shining example of what government technology can do. And I will leave the details of your

question, Jeremiah, for Jamie. He is in touch with many across the government and (inaudible) the recognition as -- of him as the top AI executive across the entire government speaks to that. But I really do hope -- you raised a very good point -- I really do hope that others can look at what we've done and learn from it. Just like we are learning from others who have done well in other areas. So, thanks, for the comments. Julie, you're on mute.

MS. MAR-SPINOLA: Yeah, thanks. I'll get used to this, sorry. We have a question from Steve, Steve Caltrider.

MR. CALTRIDER: Yes, Director, thank you for your remarks and thank you for your comments. I agree completely with the comments that Jeff made on pendency and Jeremiah. I really wanted to give a shout out as well because I think the Office over the last year has become much more predictable in many respects.

Juries in the last year have been that the 101 guidance continues to give some

predictability in a area of law that's quite uncertain. The PTAB and their precedential opinions have given, again, some area of predictability. And many, many applicants value that predictability as much as they do the speed with pendency and also the quality. So, I wanted to give a shout out to that and thank you for your efforts to not only make a more reliable and durable patent, but a more predictable patent and prosecution pathway for applicants as they go into the Office.

MR. IANCU: Thank you, Steve. It is, indeed, true that I firmly believe and I have said publicly many times that the hallmarks of any legal system, but in particular, the IP system, are predictability, reliability, and the like and we constantly work to adjust to make sure will achieve those things to the best we can. And I appreciate the comments. Thank you, Steve.

MR. GOODSON: Director, this is Mark Goodson.

MR. IANCU: Hi, Mark.

MR. GOODSON: Who knows what the political winds how they shift, but I just want to thank you for wonderful leadership the last several years. And I hope you have the opportunity to continue on.

MR. IANCU: Thank you, Mark. And thank you, once again, for your excellent service to the PPAC and to the PTO. And I hope you continue to stay engaged.

MS. MAR-SPINOLA: Oh, I'm sure Mark will stay engaged, and we will treasure that. So, thank you. We are actually staying on time. If there aren't any more questions, I want to thank Director Iancu again. And we promise to have and to continue to have a productive meeting this morning and talk about all the great things that the PPAC has -- sorry -- Patent Office has done.

MR. IANCU: Thank you very much, Julie. And, I do want to take the opportunity to thank you for -- and Jennifer for your great leadership, Julie, as the chair of the PPAC and Jennifer as the vice chair this year of the PPAC. Thank you

for your excellent stewardship during difficult times. And, I think you can take credit for being the first PPAC to have all virtual meetings.

MS. MAR-SPINOLA: Yes.

MR. IANCU: And well done. It's working out well. And in fact, you can maybe say a word on this, but I believe that one of the silver linings, despite the really difficult times, is that the viewership of the PPAC meetings as a result of the online virtual format has significantly increased. So, congratulations to you for really a job well done meeting this important (inaudible).

MS. MAR-SPINOLA: Well, we clearly couldn't have done it without the IT folks and then also Jennifer Lowe, who keeps me on track and so, we appreciate that. With respect to viewership, it is true. And, I've been monitoring it since our very first inaugural virtual meeting, which was back in, let's see, May. And our viewership at that time came up to close to 200. And what brought me quite a bit of joy was the

fact that folks stayed on until the end, and that was great. So, right now at this moment, we have 120, but I expect that to grow after people have their coffee on the West Coast, like me.

And but I do think that the silver lining, and there's always going to be silver linings, no doubt, that with the virus and keeping people at home to be safe doing remote access, you know, this expedited a tool that can be used very handily. While I, myself, really enjoy coming every quarter to be there and to work closely with the folks at the Patent Office, at the same time, we get to see everybody and I think it is a welcome change. And I would bet that it's going to hang around for quite a while. So, it's a very effective tool and so far so good. There's a learning curve to be sure, but it is great.

So, I think from there, thank you, again. And so, we're going to move on now to patent quality and pendency. And I'm going to turn the meeting over to Steve Caltrider, our chair of the subcommittee, Patent Quality --

Pendency and Quality Subcommittee. Steve?

MR. CALTRIDER: Yes, thank you, Julie. I plan to make three introductory points, which are highlights from the annual report, before handing things over for a deeper dive on pendency and quality metrics.

MS. MAR-SPINOLA: Perfect.

MR. CALTRIDER: First, as will be reported in detail, the Office continues to make strides in improving pendency. And Director Iancu just made reference to some of these data. For fiscal year 2020, was the first year that pendency was reported on the basis of the AIPA guarantees of timeliness, which are 14 months from the filing date of an application to the mailing date of the first office action. Four months to respond to an amendment. Four months to act on an appellate decision. Four months to issue a patent after payment of the issue fee. And 36 months from the filing date of the application to the issue date of the patent.

The Office goal is 90 percent compliance

with these guarantees by 2025. And as Andy and Remy will report in detail, we're on track to do that. We're in bit of a transition so, I'll also report and Director Iancu shared these data on the pendency based on the averages, which is the historical method of reporting pendency. The average first action pendency and the average total pendency, these remain below our targets at 14.8 months for first action pendency, and 23.3 months for the average total pendency. So, again, Andy and Remy will go through these data in much more detail.

The Office is also making significant progress on quality. I'll start with a comment that quality starts with the applicant. A significant factor to pendency and quality and the issues therefrom is the quality of the application filed by applicants. A well-drafted and complete application reading the information disclosure statement is more efficiently and effectively examined than a poorly drafted application.

And the USPTO has been active in

providing applicants and other stakeholders training. The stakeholder training examination practice and procedures is a step program, the patent quality chat, the computer-based training modules for examiner training are all made available to public. These are important initiatives and reflect the cooperation between the applicants and the USPTO in achieving patent quality. Within the Office, patent quality starts with the classification system in search and you'll hear much more about that this afternoon in the AI discussions and the IT discussions. So, I won't expand on that now.

The measure of quality, there's several different methods of measuring quality in the Office. And one of the measures of quality that we use is the external quality survey. And we'll hear much more on this in a few minutes. But the external quality survey measures the applicant's perspective of quality. From the vantage point of the applicant is the examiner providing a thorough examination, a fair examination, an accurate

examination, dealing with the issues raised by the applicant, citing the correct references. And on this measure, the Office continues to show improvement. And so, I won't go into the details of it. That'll be shared in a few minutes. But it's remarkable that from an applicant's perspective of quality, which is a very important perception, the Office continues to improve as well.

Finally, I want to briefly comment on the efforts to gap the bridge between Patents and the PTAB. The PPAC recognizes that the ultimate measure of quality on whether a patent is durable is whether the patent survives further scrutiny after examination. The Patents and PTAB have made tremendous progress in sharing data and the knowledge that enable feedback loops. And this feedback loop is essential for continuous learning and continuous improvement. It informs gaps in the examination process, whether those gaps are in searching or whether those gaps are in training. And the PPAC encourages this bridge to continue to

be fostered and developed and particularly encourages the investment in IT to enable the seamless exchange of data between Patents and PTAB. Because unless you have this continuous learning, you're really under developing your opportunities. You're underutilizing your opportunities to enhance quality during the patents and the examination phase.

So, with those brief three introductory comments, I'm going to turn it over, I believe to Andy and Remy next to talk a bit more about the pendency data.

MR. FAILE: Great, thanks very much, Steve. Good morning, everyone. It's good to see everyone here. I'm going to turn it over Assistant Commissioner Remy Yucel to walk through the presentation on our last year's stats, mainly on pendency on filings. But I would like to give a big thanks to PPAC. Steve, thanks to your leadership and guidance on helping us work towards looking at things like patent term adjustment and looking at pendency in different ways. So, again,

I look forward to this year, FY21, and continuing that relationship. And thank you for your support last year. And you'll see some of the remarkable strides we made last year given the backdrop of the situation that all of us are in.

So, with that, let me turn it over to Remy to walk through our stats review for FY20.

MS. YUCEL: Good morning, everybody. I'm happy to be here with you to go over just a handful of slides that encapsulate our pendency performance for FY20. If we could have the first slide, please. Or is that me? Ah, here we go.

So, again, this slide really summarizes some key points of interest for our fiscal year '20. As mentioned before, we adopted in '20 a new multi-year pendency metric to take us to overall PTA compliance of mailed actions and overall PTA compliance of remaining inventory of 90 and 90 by 25 as Steve just mentioned. We believe that this will even increase further our ability to provide certainty and the predictability that our stakeholders need and want from us.

So, we adopted this new metric. This was our first year of doing it and we are off to a good and positive start on making our way to 90 by 90. As you can see, our overall PTA compliance for mailed actions is at 83 percent and our overall PTA compliance of remaining inventory is at 88 percent. And this is the first of a multi-year goal. So, we have gotten off to a good start on that.

The next two bullets really are the traditional pendency metrics that everyone is probably a little bit more familiar with. For our first action in pendency, our goal was to come in less than an average of 15 months average to first action. And we were able to do that in quarter four of FY20. And that really compares pretty favorably with our performance in FY19, Q4, which was at 14.7 months, given that this was somewhat of a -- let's just leave it at an unusual year.

Our total pendency for FY20 ended up at 23.3 months under the goal of average 24 months total pendency. And that also compares favorably

to our performance in Q4 of FY19. Our serialized filing growth for 2020 was 0.7 percent and we'll delve into that a little bit further in some of the slides. And our attrition rate remains steady at 3.8 percent.

Next slide, please.

MR. SEARS: Remy, this is Jeff Sears. I've got a question for you before you move on. The PT --

MS. YUCEL: Sure.

MR. SEARS: The PTA statistics really great performance, let me note that at the outset. Really wonderful. I've always liked PTA. I think that the certainty that the PTA metrics provide is truly beneficial for applicants. Here's my question. Does the Office have a desired target in mind? Is the target 90 percent? Is it 95? Is it what you've hit so far? What are your thoughts? What's the goal?

MS. YUCEL: Well, I think, I mean, for me personally, I think we want to -- we want to perform as best as we can perform. I think we

need to have some sort of a structure in terms of getting there, as it will. And I think we always, you know, that's why we've made this a multi-year goal. I think we want to be able to -- we did not get into -- get behind overnight, and we're not going to get out overnight, right? So, for -- I think we have like a disciplined march towards chipping away at both the mailed actions compliance as well as keep an eye on our inventory and making sure that that doesn't balloon out of control. I think we are on a good path to do that.

Certainly, there are factors that always come into play in terms of affecting the timing of our being able to pick up cases. Some of those are, you know, stuff from the outside in terms of like missing parts, this, that, and the other. But I think we probably, I think, our biggest bang for the buck is really to try to get to these cases as soon as we can. Get them docketed to the examiners and get them worked on in a good, you know, by the appropriate examiner.

So, certainly, if we can smash the 90 by 90 -- or 90 and 90 by 25, we're willing to do that. I think that that is a ceiling for us. But I think there's a lot of factors that play into our ability to the rate at which we're going to improve and how much we can achieve. I believe it's asymptotic. I don't know that we'll be able to do 100/100, right? But so, understanding those factors that keep us between 90 and 100 percent, understanding those factors, and then figuring out what more we can do is certainly something that we need to keep our eye on. But we need to have that march to 90/90 and then we'll take a, you know, continually assess and see what else we can do to improve upon that performance. I hope that addressed your question.

MR. SEARS: Yes, thanks, very much.

MS. YUCEL: Okay, so, if we look a little bit more in the FY20 filing trends. Again, as we mentioned on the previous slide, our serialized filings increased by a little over half a percent at 0.7 percent compared to almost a 5

percent serialized growth that we saw in FY19. RCE filings have decreased by over 10.5 percent and this compares favorably to the decrease that we saw this time last year at 0.6 percent. And I think that delta really represents, I think, a notable reduction in rework. So, I think, again, our -- the efforts that have been done in the TCs by the speed, by examiners, is all, you know, coming to fruition. We are beginning to see less rework, and that is always fire power that we can devote to other types of cases such as the first actions.

Our provisional filings have increased by 2.9 percent, which is almost double what we had last year. Again, the jury is still out in terms of what this increase in provisional filings will mean to non-provisional filings that we will see in FY21.

Lastly, our design filings increased by 4.1 percent compared to a 0.8 percent increase in FY19. The story here is that for most of the year, it was really quite flat and then we

experienced a spike towards the end of the year, you know, pulling us up to 4.1 percent. So, it's going to be interesting to keep an eye on that trend and see whether that might be a leading indicator for the non-provisional utility patents. It's still too early to tell on that.

Next slide. If we take a closer look at the serialized filings by country of origin, the data for '20 is in the red bars and the data for FY19 is the blue bars. Really, there were three countries that experienced filing growth and those were -- the country of origins were China and South Korea and Taiwan. Everybody else was flat or negative. And if you take a closer look at the data, really, the two countries that drove the growth for '20 were China and South Korea. By contrast, U.S. filings are about half of our total filings, and there was a negative 1.5 percent growth there.

Next slide. Again, if we look at USPTO filings by priority type, again, similar data on the graph shows '20 data in red and '19 data in

blue. Our increase are -- the.7 percent increase was primarily fueled by the filing of continuations. Although national stage applications of -- applications of foreign priority or brand new applications also contributed some to the growth.

Next slide. Interesting slide here as we took a deeper dive into the continuation filing trends. And you can see that, you know, we talked that continuations were fueling most of the growth of our filings last year. And the graph shown towards the right kind of bears out, this is a 10-year look, last decade look of filings of continuations. And CIPs, continuations-in-part, and divisionals, you can see that the blue curve for the continuations has a steady increase. In fact, it's tripled over the last decade, while the filings of continuations-in-part and divisionals have remained very flat.

This has some impact on our ability to balance workloads as effectively as we would like. And as well as it does make the docketing of

first-in and first-out a little bit more tricky. These are things that we are all working to balance and work in and compensate for. And another interesting fact is a large majority of these continuations stem from allowed applications. So, 80 percent of continuations have a parent that has been patented and about 1 in 5, or one-fifth of all issued patents will generate -- I like they use -- they use spawn, but that just has different mental images for me. So, I'll just say generate another continuing application. So, these are interesting trends that we need to keep an eye on and kind of manage our docketing and balancing of the workloads accordingly.

I believe the next slide is the last slide. Next slide, please. And finally, if we look at serialized filing by entity status, again, we've shown the data for '19 and '20, they are remarkably similar showing that there's, you know, relative stability. And as we would expect, most of the growth that we are getting appears to be

coming from the large and undiscounted entities followed by the small entity, and then the micro entities. And that's, I believe, my last slide. I'm happy to take questions.

MR. CALTRIDER: Just a comment as we transition to the next topic, but also a question as well. The comment is the Subcommittee on Patent Quality and Pendency is looking at the continuation practice with the Office and trying to study that in more detail. So, in a future meeting, we'll report out more on what we think is underlying that trend and try to get a deeper understanding of that. The question is, on the growth and new application filings from China and Korea, I believe, were the two countries that were double digit positive relative to the others, do we have any understanding of that? Or do we have any hypotheses that -- or any data available to us to try to help us understand that a bit more?

MS. YUCEL: Andy, do you want to jump in? I think that right now this is just our observations. I'm not sure that we have any

necessarily a hypothesis behind it. Andy, you might have more information?

MR. FAILE: Yeah, sure. I'm happy to jump in. That's a great question, Steve. That's one of the things we're actually looking into and studying. We're seeing increased growth rates from China in trademarks and patents filings. So, it's kind of a phenomenon I think that is beyond patents. So, it's one of the things we're looking into to try to divine kind of is there -- to me, it's the genesis of the trend is one issue. Another thing, I think, to be looked at is do we think this is going be a trend that continues or even increases? That has, you know, a lot of impact on our workload analysis as we go forward.

And the initial look into it is we do think the trend from China will likely be at the same level or even more for FY21. But it's a great question. It's something we're definitely diving into. The origin of the increase in filings and then maybe even more importantly, do we see these filing trends continuing? That'll

add into the growth, add into the workload you'll need to deal with on the backend.

MR. CALTRIDER: Thank you. That's the --

MS. MAR-SPINOLA: And, yes --

MR. CALTRIDER: -- best we can -- we could take, also take that up in subcommittee and report out in a future PPAC meeting.

MS. MAR-SPINOLA: Yeah, this is Julie Mar-Spinola. A question to Andy or Remy on this. Would it be appropriate to put out a survey to ask about forecasting for applications or anything like that?

MR. FAILE: Yes, that's an interesting idea. My suggestion, Julie, would be can we put that in our next subcommittee steering meeting to package along with all the other things we may want to do? That's a very interesting idea. And I think, Steve, if it's okay, we can add that into our next meeting and talk through the pros of cons of doing such a survey.

MS. MAR-SPINOLA: Yeah, and not just

what the forecast, but the reasons for their forecasting, or supporting their forecasting.

MR. FAILE: Very good.

MS. MAR-SPINOLA: Yeah.

MR. FAILE: Very good idea. Any intel we can get in to help us manage what a growth trend would be, whether it's positive or negative, I think is very helpful to us.

MS. MAR-SPINOLA: Great. Okay, Steve --

MR. FAILE: Thanks for that.

MS. MAR-SPINOLA: -- that's on your topic -- that's on your next list.

MR. CALTRIDER: I'll add it to my list.

MS. DURKIN: Steve, before we transition, could I ask one quick question? It's Tracy Durkin.

MR. CALTRIDER: Sure.

MS. DURKIN: So, do we have any sense of whether any of the 4 percent increase on the design patent side is at all related to Hague System filings?

MS. YUCEL: I think that those are --

MR. FAILE: I'm happy to --

MS. YUCEL: Go ahead, Andy.

MR. FAILE: Sorry.

MS. YUCEL: Go ahead.

MR. FAILE: No, go ahead. I'll start and then Remy can --

MS. YUCEL: I believe that there is like --

MR. FAILE: Let Remy start, and I'll jump in.

MS. YUCEL: I believe that we track those separately so, those are non-Hague filings.

MS. DURKIN: Great, thank you.

MS. YUCEL: So, we --

MR. LANG: This is Dan. Can I put a question in too?

MS. MAR-SPINOLA: Okay, hold on one sec, Dan. I just want to give everybody an idea of the time. So, we actually have -- we have about 15 minutes. So, let the questions and discussion continue.

MR. LANG: Great. I wanted to focus

again on that very sharp lineup in filings in China and South Korea, which, you know, we'll see what the future holds. But if that's extrapolated forward, could lead to, you know, very, you know, significant volume attributable, you know, to those countries. And both in absolute terms and in percentage terms. Do we have any insight on the distribution among different entities, you know, coming from these countries? I mean, my instinct would be that, you know, comparing China or South Korea to the United States it's much more heavily weighted towards the larger organizations rather than the smaller ones. Is there any work on that?

MS. YUCEL: I am not aware that we've broken it down like we have for our domestic filings. But that would be a very interesting thing for us to go back and take a look at. I'll add that to the to-do list. Thank you.

MR. LANG: All right, thanks.

MS. MAR-SPINOLA: Actually -- go ahead, Jennifer.

MS. CAMACHO: Yes, I just have a quick follow-on question to Dan's question. Have you looked at and is there anything surprising in the technologies that are increasing from filings in China and South Korea, or is it fairly predictable?

MS. YUCEL: I am not aware that it -- that there is like a particular pattern in the technology. But also, that's another thing that we can do a deeper dive into.

MS. CAMACHO: Thank you.

MS. MAR-SPINOLA: Thanks. I actually have been corrected that I believe, Steve, you still have another second part of the presentation?

MR. CALTRIDER: Yes, yes, we do. We need to transition to our quality discussion.

MS. MAR-SPINOLA: Of course.

MR. CALTRIDER: And I'll hand things over to -- I'll hand things over to Robin who will introduce Marty.

MS. MAR-SPINOLA: Sorry, Marty.

MS. EVANS: Thanks. Thanks, Steve. So, as Steve said, we do a survey, a semi-annual survey to our top filers, firms, and entities. And this is a quality perception survey. So, what Marty is going to talk to you about is the most recent survey that was done this summer. And you will see there are some positive outcomes and some positive trends throughout this survey. What we plan to do because we know the effort to improve quality is continuous, and we appreciate PPAC's help on that as well, we're going to take this survey and compare it to our internal measures to see where we should go and how far we should go, and which way we will go to continue to improve quality. So, with that, I'll turn it over to Marty.

MR. RATER: Thank you, Robin. And, Julie, no need to apologize, I'm a big fan of the next session coming up. So, we'll get out of here by 12:20, I think, is what the agenda for.

So, you know, a lot of these slides too, I think we've briefed on this survey before. So,

we've got a couple slides here on a little bit of the background of the survey. And I think, well, obviously, we shared the slides with the session, I think a lot of this data people can grasp rather easily and see where we're going, so, I'll just kind of scroll through and hit the highlights.

If we want to jump, actually, a couple of slides here and show the where we are at. Go ahead and skip to the next one. See, I'm already making fans here by skipping forward. So, this is our alligator chart, right? And this is where we want to be. What this is showing in our survey, we ask, and this is a survey of frequent filers what we define them as, about 3,200 customers, stakeholders, applicant, agents, attorneys, however we define that. Going into we asked them about their satisfaction with quality over the prior three months. This is what's been tracked since about this chart showing since 2009, the end of 2009, we've actually conducted this survey since 2006.

So, we asked them overall. We ask them

a five-point scale, poor, very poor, fair, good, or excellent. So, we're not showing fair on this because we're really focusing on that difference between good or excellent and poor and very poor. And you can see, we've kind of showed a steady incline in the good or excellents. We got a bump up there about that 61 percent in FY19 quarter two right around the time of the patent eligibility guidance came out. And we've been able to maintain those strong perceptions, right? We do see some customer perception bump ups every time we actually communicate what we're doing about quality.

So, this chart shows a couple of things. One of the things I want to point out here, and I'm really just because it's going to lead into the very next slide, is to look at that blue line down at the bottom. And that's the percent of customers, or poor and very poor, saying quality is poor or very poor. And you can see back in the end of FY09 it was 24 percent. We rode a period there where about 10 percent of our customers felt

quality was poor or very poor. And you can see over the last two years, we've dropped that down to 7, 5, 6 percent of our customers feel quality is poor or very poor.

And, you know, that's a significant improvement as well, right? We have reduced about 50 percent, 33 to 50 percent of the customers that said quality was poor or very poor overall, we've at least brought them out of that poor or very poor range. We might not have gotten them to good or excellent yet, but we've at least brought them up into the fair.

So, that goes to the next slide. We like to look at both sides of this puzzle, right? And, you know, and kind of to Jeff's question a little bit earlier there about what's our -- you know, what's the goal for pendency and where should be dialed in? I'll say the same thing on quality, right? We probably want 100 percent satisfaction, but is that realistic, right? We're always balancing, you know, faster, better, cheaper, right? That old puzzle we are all trying

to solve. So, where are we at?

So, one of the current things that people are kind of looking at is we've kind of morphed more into this customer experience, customer journey world is these Net Promotor Scores. And we've kind of basically tracked that, you know, we've been doing that for a while. And we've always kind of looked at it as just a ratio. How many happy customers in quality do we have for every dissatisfied customer? And that's that ratio column there. And you can see back at the end of 2009, for every customer that we had saying quality was poor or very poor, we only had one that was saying it was good or excellent.

Then you jump down to where are to end of today in FY20-Q4, you see we've got roughly 10 customers are likely to say quality is good or excellent for every one that is going to say poor or very poor. So, we're looking at both sides of that coin, if you will.

And then to kind of translate it into today's world, the Net Promotor Score you start

seeing that advertised out there in companies. And nobody has a goal of a Net Promotor Score of 100, right? One hundred people are satisfied and zero percent are dissatisfied. That's not all that realistic. So, what we're looking at, and you can see our Net Promotor Scores grown at that one time it was a whopping four. It kind of bounced into the low 30s, up into the lower 40s. We kind of hovered around in that 40s. And you see over the last two years, we've been in that range. Now, that's kind of significant level because there are some benchmarks out there that indicate that once you kind of get to that gap, if you will, between very satisfied and very dissatisfied, you're starting to get into a healthier environment and some organizations label that as an excellent environment. Not to say you should be satisfied and you rest on those laurels, but it's a pretty healthy environment.

And that's kind of where we're at right now. Now, I will note that it varies by industry. We're a little bit difficult to compare to a lot

of other organizations, but these are some strong indicators that we're at least going in the right direction at least in the minds of customers. So, and I'd never answered -- I raised Jeff's potential question there. The other thing where I say we want to go is we want to get to a point where reality meets expectations. It's as simple as that. And we know that those expectations will change and we know reality changes. We just try to want to get those working together. So, that's kind of our goal.

So, if we go to the next slide. I've pretty much focused on good or excellent and poor or very poor. And you guys can all digest this afterwards. But, you know, I don't want to ignore the fair. The people that are in that fair category, right? Those are our movers. What this is showing is just simply a flow. Our folks that say quality is good or excellent and there's that 57 percent, well, we ask a secondary question. Do you think quality is improving? Do you think it's staying the same? Or do you think it's declining?

The last thing we want is all of our good or excellent folks, their good or excellent rating folks, to say that quality's declining. We want to know if there is something declining, what is it that you might -- that we need to fix to maintain your high level of perception?

And similarly, in the fair, you want to look at those that say, well, do we have more people willing to say it's improving, and we've at least got a chance of getting them up into the good or excellent ratings? Or are they saying it's declining and we might see them show up eventually in the poor or very poor? And then at the very bottom there we have the 6 percent of the customers that say quality is poor or very poor. And I think of interesting of note there of that customer base, you don't see any of those customers. We don't have a flowline going all the way up to improved because none of those customers are even willing to give us the nod right now that we are improving, right? They're saying it's staying the same or we've even got kind of a

similar amount that's saying, hey, you're making things worse.

So, you know, those customers probably have a little bit different needs than the good or excellent and the fair, and we need to balance all of those. So, we're kind of looking at this at a little bit more holistically now. But at the end of the day, we have 24 percent of our customers say that quality is improving, 11 percent that say it's declining. As long as we can have a strong ratio of that and right now it's two to one, again, think Net Promotor, we've at least got, you know, a difference of 10 there, 10, 12 percent. Obviously, we want to improve that gap and we've got to figure out some things that we can recognize. And a lot of that is messaging, a lot of that's communicating some of the stuff we're doing.

If we go to the next slide, we'll bounce through here. So, because a lot of these next couple of slides you've all seen before, and I'll point out some new differences or correctness.

Correctness of rejections, right? So, we'll and this is very similar, we ask internally when we do our internal quality review, we're assessing the quality of the rejections made by examiners. This is just external perceptions, and you can see we ask that because they're frequent filers, we're asking them about all of the Office actions they received in the prior three months.

So, this is just did they see it as most of the time we were correct, some of the time, or rarely? I will point out that our next survey study we're actually going to expand and do some exploratory research with the customer base to figure out when you say most of the time, what is that number? Does that mean we're at 90 percent, 95 percent, 75 percent? What is defining that so that we can do a better job of equating that with our internal quality numbers.

Thing to point out here. Obviously, opportunities for improvement, you see the 103 rejections. Only 44 percent of the customers say we're most of the time. Conversely, only 6

percent say we rarely do it, right? So, you know, we've got the healthy ratio there. But you shift over to the 101 rejections. And this is when the 101 rejections were made. We still have a significant amount of displeasure, if you will, or angst, about 101 rejections. We don't see it being quite such a factor. Obviously, we've reduced the number of 101 rejections that are made out of the Office. That's had a significant impact. But you see here that's almost a one-to-one ratio. For every customer that we ask about 101 rejections, that says it's excellent, we're likely to run into another customer that says we rarely are correct in that.

So, the next slide. Correctness is one thing. Mr. Caltrider mentioned a key term, predictability. Well, you can be predictable if you're 100 percent correct all of the time, but I think the biggest basis of predictability is consistency. And we have continually seen consistency -- continuously seen consistency be an important driver of overall perceptions because of

that predictability factor. You can see it does not make much of a difference here. Very similar to correctness. And I don't think that's unreasonable to expect correctness and consistency to kind of go along. We do see when you break it down on individual levels, customers will differentiate. And we've actually had comments that, hey, I know you're incorrect a good portion of the time, but you fixed the consistency issue. I at least know how to address these, right? But if I'm getting a flip of the coin, I don't know how to address that.

Next slide. This is a little bit for everybody to digest in their comfort. This is just a breakdown of data by technology sector. I don't want to spend a lot of time on this. It's a lot. But this kind of is basically a matrix by technology sector of consistency versus correctness. And if you see a diagonal line, you know, going from that lower left quadrant all the way up to the right-hand quadrant, that shows the correlation between correctness and consistency.

What I want to point out here, and you notice in the yellow circles there, I've provided the Net Promotor Scores. We have a high Net Promotor Score over there in the chemistry sector of 58. And they're all strong across the board because we're strong across the Agency right now. But what you'll see is different patterns for each of these groups. You get down into the mechanical engineering, you know, you kind of got a cluster of satisfaction with 102 and the 112s, but then you've got a pretty good gap between 103 and 101 rejections. Meanwhile, you move over to that bottom left, and you see instruments, it's a cluster of all of the different rejection types. So, probably there where do you pick and choose and what to focus on? And that's where we're kind of looking at this data a little bit to do some targeted reviews.

All right, let's go one more slide here. I've got a couple more slides. This one's nothing new to anybody. Correctness, how does it correlate with overall quality 103 rejections?

103 rejections are in 75 percent of the finals and non-final rejections we send out. If we make customers happy with the correctness of 103 rejections, 8 times more likely to be satisfied with quality overall.

So, I want to move to the last couple slides here because there's a cool new key driver we think's coming into play. We ask a question about adherence to rules and procedures. Shift to the right. Well, first let's start with the one on the left, citing appropriate prior art. Sixty percent say that we do it to a great extent of the time. We have another statistic as well. We ask our customers to evaluate the search and prior art found. Sixty-seven percent of our customers are satisfied, good, or excellent prior art and search. And only 3 percent feel that it is poor or very poor. And that equates kind of to the citing appropriate prior art as well.

Shift to the one four over substantively addressing response to Office actions. This is one we've seen kind of not going quite the way we

want over the recent years. Twenty-eight percent say we address it to a great extent of the time. Only 19 percent say -- well, actually, 19 percent say to a small extent. You see restriction practice on the side? That's kind of a wonky one for us. We don't see that great customer experience or customer satisfaction with that. But when you also go back to those technology charts either, it doesn't seem to be a driving factor of customer perceptions. Now, it's a dissatisfier, but it's not one in that decision matrix yet.

Next slide, just because I want to hammer on this addressing response to Office actions. Let's focus on this table again. I think a lot of you can read this after the fact. If my customer base that said, hey, you do this to a large extent of the time. You address our response to -- you respond to our responses and you address those. None of those customers would say quality overall is poor or very poor. And 71 percent of those customers are likely to say

quality is good or excellent. You drop down to that last row of that table. If you tell me that our response to your applicant arguments, we only do it to a small extent of the time, you flip a coin. Thirty-three percent of them say quality is poor and very poor, and only 33 percent good or excellent. Look at those Net Promotor Scores. Just simply one variable here has such a disparate level of that net Promotor Score and is definitely something we're going to be looking at to focus on in the coming year.

Last slide. And I'm sorry, I'm going just a minute over here. We asked about customer comments. This time we think about quality of work products and the varying prosecution processes among other offices. Let me boil it down for you real quick. They thought we're doing pretty good in prior art, right? There's always some plusses and some minuses, but customers acknowledge some efforts and improvements in prior art. Consistency, I've mentioned that. Needs some improvement just because they want

predictability. Whether that consistency is in the applicability of standards or it's actually somewhat in the format of how we write office actions. We're starting to see more comments on that way.

101 rejections still jumps up as a need improvement. A lot of that is just dissatisfaction with the general landscape out there of 101 where, you know, that's nothing new to us. And then finally, and I think this is just a kudos to the examiners and what really were pointed out in the comments when compared to the other offices is our use of interviews. The examiner's willingness to use interviews for compact prosecution to understand concerns and to -- and then on top of that, just being willingness to do it.

And the last bullet there, as well, is examiner responsiveness. Especially we've gone to telework, absolutely knocking this one out of the, you know, park in terms of the comments we're receiving and a lot of customers really, really

congratulatory and commendable of our examiners for those two things. And I think that's a little bit of really what's kind of the driving, right? We're setting expectations and driving that quality number more so maybe than the rejections sometimes. That's all I got for you.

MR. CALTRIDER: Thanks, Marty.

MS. CAMACHO: Marty, thanks for those comments. I do have one question from the public. Just a quick point for clarification. The question is whether in these surveys when you're talking about the customer, is the customer the practitioner or the applicant? Perhaps you could tell us a little bit about who you're polling there.

MR. RATER: Okay, so, obviously, we want folks very familiar with the office actions. So, our sample frame is any -- agents and attorneys makes up the biggest portion of this, obviously. So, it is the, you know, our touchpoint in who we're interacting with. In some instances, we do have inventors, we do have entities that are large

filers or, you know, I think our last cutoff was 6 or more patent applications in a 12 to 18-month period kind of qualified for the survey. We were looking at other survey mechanisms to maybe get to that customer or those individual transaction points.

MS. CAMACHO: Thank you.

MR. CALTRIDER: And before I hand things back over to Julie for the rest of the agenda, because I know we're getting tight on time, I do want to make a comment both about the examining core as well as the leadership and their absolute dedication to excellence in this space. The commitment to improve quality and the commitment of excellence is really, really notable. And I think the data show that. A Net Promotor Score of 50 or greater, I don't know that everybody appreciates how significant that is. But there's a lot of businesses on the outside that would dream of a Net Promotor Score of 50 or more.

And that really reflects the commitment of excellence that the Office brings to this. And

it's a journey. We'll always be working to improve quality as Robin shared in her opening remarks. It's a journey. You never reach the endpoint because you're always striving to do better. But the commitment to get better is really notable. And thank you and thanks to the examiners who are on the front line of that.

Julie, I don't know that we have any time for -- more time for questions, so, I'll hand things back over to you.

MS. MAR-SPINOLA: Well, thank you. And maybe if we have some extra time later, we can come back. But I think it was a great presentation, very informative. While there's always room to improve, I completely echo what Steve just said which is that the commitment to continue finding improvement and making improvements is as important as the improvement itself, I believe. So, thank you very much for that. And let's move over now to innovation expansion with Jennifer Camacho, our vice chair, is also the chair of the Innovation Expansion

Subcommittee. Jennifer?

MS. CAMACHO: Thank you, Julie. So, just a few highlights from our annual report. As you know, in the beginning of this year, PPAC introduced the Innovation Expansion Subcommittee. The purpose of this subcommittee is to support the USPTO in its commitment to increasing inclusiveness and diversity in innovation and inventorship, and also making the U.S. patent system more accessible to all Americans.

And as the Director noted this morning, our patent system encourages and strengthens American innovation, which, of course, is critical to our economic prosperity, safety, and security. For the system to be most effective though, the door of opportunity must be open to all Americans to innovate, pursue patent protection, and really reap the rewards from innovation through entrepreneurship in commercialization.

Today innovation in the U.S. is highly concentrated based on demographic characteristics, geography, and economic conditions.

Underrepresented groups such as women, minorities, and veterans present a tremendous resource of unrealized potential for innovation and invention. And as Julie noted earlier, we need to tap into that resource in order to expand our innovation ecosystem. We need to ensure that individuals from unrepresented groups have a meaningful opportunity to fully engage and participate in our patent system.

During the inaugural meeting of the NCEAI, Secretary of Commerce Wilbur Ross recently noted that too small a segment of the American population is engaged in the innovation economy and the creation of inventions and the development of new and novel products and the formation of entrepreneurial companies. We will have difficulty being successful as a nation if we do not have more people engaged in the creative economy.

So, by way of a background, as many of you are familiar with, but many may not be. The Study of Underrepresented Classes Chasing

Engineering and Science Success Act of 2018, the SUCCESS Act for short, required the USPTO Director to conduct a study and report back to Congress on the number of patents annually applied for and obtained by women, minorities, and veterans. And the USPTO published its report to Congress in October of 2019. So, the very end of the last fiscal year.

In the report they noted that the number of patents with at least one inventor -- one woman inventor -- excuse me -- increased from about 7 percent, only 7 percent in the 1980s to 21 percent in 2016. But notable differences in the number of men and women patent inventors persist despite greater participation of women in the science and engineering occupations and the entrepreneurships. So, it's not keeping pace. Women inventors are increasingly concentrated in specific technologies and women inventors or women are increasingly likely to patent on large gender-mixed inventor teams as opposed to being a solo inventor or being on a women- only team.

Subsequent to this report, the Patent Office prepared an update in 2020 and added to the findings that the share of women among all new inventor-patentees increased from 5 percent in 1980 to 17.3 percent by the end of 2019. That means that more women are entering and continuing to be active in the patent system than ever before. That's good news. And 46 percent of women who obtained a first patent in 2014, patented again within five years of the first patent versus 53 percent of men. In 1980, the gap was 28 percent for women versus 38 percent for men. So, the gender gap in the number of inventor-patentees that stay active by patenting again is decreasing. Again, that's good news.

So, in our 2020 Annual Report, we highlighted several initiatives of the USPTO that are intended to make the patent system more accessible to underrepresented groups. Of course, the goal is to increase the participation of individuals from these underrepresented groups in the patent system. And despite the many

challenges posed by COVID-19 pandemic in this fiscal year, the USPTO made notable progress and even hit some key milestones in several of its innovation expansion initiatives. And I'd like to highlight some of them here.

The most notably, of course, the USPTO accomplished a really significant milestone with the successful establishment of the National Council for Expanding American Innovation, NCEAI. This council is chaired by the Secretary of Commerce Wilbur Ross, and it really brings together a cross-section of the U.S. innovation ecosystem. Members of the NCEAI include leaders and high-level officials from industry, private and public corporations, small businesses, academia, nonprofit organizations, venture capitalists, and the U.S. government, as well as, and importantly, independent inventors. And Valencia will talk a little bit more about that following these comments.

So, a little more information on NCEAI. It starts with developing a national strategy to

foster innovation competitiveness and economic growth by promoting and increasing participation of our underrepresented groups as inventor-patentees and entrepreneurs. As well as a long-term comprehensive plan of action to further build the U.S. Innovation ecosystem, and particularly and interesting, in areas that will be key to the next technological revolution.

As mentioned before, the inaugural meeting of the NCEAI was held by video conference in September of this year. And if you weren't able to tune in to the meeting, I echo the Director's encouragement to you to read the opening comments of the NCEAI members. It really is very inspirational. So, again, Valencia will expand upon this here in a few minutes.

And one of the other exciting initiatives, the USPTO also launched the Expanding Innovation Hub. So, this is a dedicated central location for information about many of the relevant USPTO programs and resources for inventors. And it's designed to inspire more

women, minorities, veterans, geographically and socioeconomically diverse inventors and innovators to join the innovation economy. Really take a look and let us know what you think. I think it's very exciting.

And I also wanted to highlight a couple of very creative and cool new IP toolkits that the USPTO released in the hub this year. The first one is the demystifying of patent system toolkits. And this is designed to help innovators understand the process of obtaining a patent so it's not such a mystery anymore. So, you do know how to start and to enter that whole system. As well as the mentoring toolkit. This is very cool. I haven't seen this done before. This is intended to assist organizations in establishing infrastructure to connect experienced innovators with the next generation in their organization to really build that pipeline there. That's important. Excuse me.

I also wanted to highlight a couple of the outreach and events that USPTO was able to

complete. So, notwithstanding the challenges of the COVID-19 pandemic, the Patent Office maintained a very busy schedule of outreach and events for fiscal year 2020. And as soon as the social distancing and travel restrictions were coming online, the Patent Office transitioned to an -- began transitioning in- person events into virtual events managing to host and participate in numerous educational and information events specifically directed at underrepresented groups in the patent system.

Just to highlight a few, the Patent Office participated in a Rural and Independent Innovators Conference in Dodge City in Kansas. And in February of this year, the Patent Office invited students, inventors, entrepreneurs, innovators, public institutions, tech firms, others to celebrate the Black History Month at Tuskegee University and at Alabama A&M University under the theme of building a legacy of impact for invention. And then in March, the USPTO held a two-day Women's Entrepreneurship Symposium

connecting women entrepreneurs with information and resources to help start and build a business based on their own IP. It's very exciting.

To wrap up my comments, we always provide some recommendations. And in this case, you know, there is an undeniable challenge in the data acquisition and the analysis related to the participation of underrepresented groups in the U.S. patent system and innovation ecosystem. But the Office has done a tremendous job in gathering groups related to gender. But there's still this challenge on getting data that goes beyond that as far as the underrepresented groups. And without this data it would be difficult or even impossible to identify the hidden drivers of underrepresentation of specific groups. It will also be difficult to measure progress if we can't establish an accurate baseline.

So, with that in mind, we recommended that the USPTO continue to engage with other government agencies on the potential to share relevant data and analysis. So, these are data

that other government agencies are able to collect that would shed some light potentially on the underrepresentation of several groups at the Patent Office. Along the same lines, we recommended that the Patent Office explore partnering opportunities with organizations in the private sector to access data that could help us bring into focus the bigger picture on how and why women, minorities, veterans, and other underrepresented groups participate or don't participate in the patent system.

So, before I hand this over to Valencia, I just want to stress that the importance of this effort cannot be overstated. Despite the unprecedented challenges of 2020, the USPTO continue to work with all the urgency this effort requires and frankly deserves. The level of leadership, engagement, and energy coming from the Patent Office team starting with Director Iancu, Deputy Director Peter, and Valencia Martin Wallace has been absolutely unwavering and quite inspirational.

And with that, I want to applaud the Patent Office for its commitment and its dedication and its demonstration of that commitment and dedication to increasing diversity and innovation inventorship. It's been a true pleasure and privilege to work alongside the Patent Office on this effort. So, Valencia?

MS. MARTIN WALLACE: Thank you, Jennifer. Thank for those very, very kind words and while my presentation is coming up, I'd also just like to say just a huge thank you to you, Jennifer, personally, as well as the Innovation Subcommittee and the entire PPAC Committee who have been so amazing in your support and active support of what we are doing here at the USPTO. The subcommittee meetings we've had have just been so fantastic to not only help us to hash out the ideas that will go into national strategy, but bringing in guests that have expertise in the particular areas that we're looking to address in the strategy and helping us move this forward. It's been invaluable not only for the strategy,

but in helping us to really develop, bring to us the right people to be on the council and helping us to formulate it. It's been an amazing partnership that I hope to enjoy for many, many years to come.

MS. CAMACHO: Thank you.

MS. MARTIN WALLACE: Now, I will start with if we can move to the next slide. And just, you know, talk a little bit more in depth about what Director Iancu mentioned earlier and what Jennifer also summarized.

So, the National Council -- and I won't -- Julie did -- I'm sorry, Jennifer did a great job of sharing, you know, where this started. So, I'll just say briefly, the SUCCESS Act report provided several initiatives, one being the council that will develop the strategy for this nation.

Can you move to the next slide? So, the inaugural meeting was the NCEAI made of 29 high-level officials as Jennifer mentioned from industry, nonprofit organizations, academia, and

various government departments and agencies. The meeting held on September 14th had an opening session where we opened to all and allowed the press to come in and to hear. I'm so excited to say that outside of the members and some special guests that we had, we had 931 people tune in to our livestream and to hear from the Council members and to also follow-up with sending us comments and ideas that we could also consider for the strategy.

We had the feature speakers in the opening session that we're very excited included the Secretary of Commerce who chairs this Council, as well as Director Iancu, and several CEOs and university presidents who also were able to really explain why this is important. Not important to just their organization or company, but important to our nation. And what they've been doing all along to really address this, but also why now is the right time to come together and really collectively pull all of the great initiatives and programs that have been going on for years

together so that we can have the impact we're looking at in bringing more underrepresented groups into the innovation ecosystem and to have the vision of someday not having to use the term, underrepresented groups when we're talking about the innovation ecosystem.

And if we can move on to next slide. So, the second portion of the meeting was a closed working session for the Council members at the USPTO. Our Chief Statistician Andy Toole who is also a key member of our Expansion Committee at the USPTO, gave an overview of the national strategy concept paper that is setting the framework for the working discussion. There was a very robust discussion and sharing of ideas on the working group -- from the working and will continue -- we will continue to keep collecting best practices and ideas.

And I mentioned a working group. So, we have this Council made up of very distinguished executives from across the different sectors that we mentioned earlier who really brought the light

that we really needed onto this topic. And underneath that Council is a group of working group members who are representatives identified by the Council members, as well as several others that are doing just amazing work within this arena that we felt could really bring us to where we want to be with this national strategy. So, this working group is assisting the core team strategy team as the USPTO to develop the strategy.

And I'll mention really quickly, I said the concept paper. So, the concept paper that we've established has four sections to it. First being creating innovators. And I'm very specifically using the term, innovators. We have a lot of work being done in awareness in education of STEM fields and from very young ages all the way through college and beyond. I'm using the term, innovators because the STEM is pivotal and very important, but it's a piece of it. We also to create inventors to create patent owners, need to also provide other aspects of innovation and entrepreneurship in order to really develop the

inventors, develop the technology, and have it be something that's moving forward for our nation, as well as for the individual.

So, the creating innovator is starting from as Julie actually mentioned earlier, three and four years old and making them aware, educating them on not only how amazing the STEM fields are, but other aspects of innovation. And then growing through practicing, the second section of our strategy. Practicing innovation as to how to apply all that they've learned throughout their lives. This is the lifespan of an inventor and a patent owner.

And from there to realizing innovation, which is the third section of our -- will be the third section of our strategy on how to identify commercialization techniques and how to identify and get in touch with VCs and the grants and the funding in order to make an inventor's invention a reality and to make it lucrative for the inventor as well as for our nation. To keep us at the forefront of technology and world leaders in

technology. As well as a shining example of how using all different diverse aspects of our community, our nation, is what makes what we need to have and makes it better and helps us to progress.

So, I will go up to the next slide. So, I wanted to just go a little not into too much depth on, but let you see our Council members. So, as we mentioned, they come from industry, nonprofit, academia, other government departments, and here you can see our federal government. We have cabinet level members. And this is just, you know, what I'm showing you here by the level of executives that we have and where they're coming from. Just shows you just how important this topic is to all members of our society.

And can we move on to the next slide? It shows in education, as well as independent inventors. And I'll just share that we were told by this Council, by this subcommittee, as well as others, that to have -- to be able to move in the direction we need to go and have the impact, it

can't be just, you know, the large corporations and their executives on this Council. But we have to have a diverse group, which meant independent inventors, nonprofit organizations, academia. And I'm so proud to say that, you know, when we reached out and asked that there was no doubt that each of these sections, areas of our community really just pulled together and said, yes, we will stand for this. We will support it, and we will actively move towards the innovation community as needed.

And if we could move on to the next slide. This shows you from industry CEOs and COOs who are not only willing to support what we're doing, but actively be a part of what we're doing within their organization, as well as in our community as a whole.

We can go on to the next slide shows you further industry executives as well as venture capitalists who have also pulled together with us. And our representative from a small business, the small independent inventor, as well as from

academia, Dr. Javiar Diez is also a professor. And notably to say that as part of his company and his invention, his students that he brings along with him, which makes it a valuable aspect of learning as well as part of this strategy what we're learning from him. And we'll move on to the next slide shows you the nonprofit organizations that have also stepped up to be part of this Council.

And then I can talk to you a little bit about our next steps. So, we've been meeting and hearing with the working group, and they're coming together and assisting us in really further developing the strategy based on the concept that was approved through the Council earlier. We, as Director Iancu mentioned, we are now developing a Federal Register Notice because we want to hear from everyone. So, it will be a series of questions for the public to answer that will also be considered as part of our strategy.

We also have an awareness campaign going on. So, building the strategy is a lot of hard

work to do it right. And we're doing it, but that's only a piece of this. Another part is making sure that we make our community aware, as well as educated on the strategy. So, we have a huge awareness campaign going on of the NCEAI what we're doing, gathering information. But after the strategy is published, we will also be going around across the nation to educate on the strategy so that all organizations, local communities, schools, companies, all will adopt it and use it and really start making that difference.

And also, the strategy I keep speaking of it. We are looking for the summer of next year that that strategy will be published. And just speaking a little bit about the engagement a little bit more about the engagements. Director Iancu, and it was mentioned earlier by Julie, has really done an amazing job of reaching out to all aspects of our community and has a series right now the Director's University Engagement Series where he's speaking to staff, faculty, and

students, neighbors across our nation. And in fact, he is doing one today with Howard University, which I'm also proud to say is a member of our Council.

And this is our website as was mentioned earlier. We do have -- we have talking points and we have thoughts from our Council members as well as Secretary Ross and Director Iancu about expanding American innovation, the direction that we're going in. And it is as Jennifer also mentioned, very inspiring words that I go to every now and then just to help, you know, reenergize me on the direction we're going, what we're doing, why we're doing it, and how important it is.

So, we've made a lot of progress. We still have a very, very long way to go. But I know this group, this Council, is standing up with us and going in this direction, as well as the NCEAI. So, I have a lot of energy left still for this. We have a long way to go, but we're going to get there. And it's not only going to impact our present day, but it's going to impact future

generations to come. And as I mentioned earlier, making sure that there is no such term as underrepresented groups when you're talking about the innovation community.

So, we can move on to the next slide. I believe that's the end. So, thank you so much for listening to me and if we have any time for questions, I'm very happy to take them.

MS. MAR-SPINOLA: We do have time, Valencia, so thank you very much. This is so important I think to all of us. So, Jennifer, I'm going hand it back to you to handle any questions there may be.

MS. CAMACHO: Sure, great. So, if anyone has any questions, please raise your hand. In the meantime, I wanted to remark that as you may have noticed, the logo for the NCEAI and as well the initiative, is a tree. And it reminds me of the proverb when, you know, the best time to plant a tree was 20 years ago, and the second best time to plant a tree is today. And that always makes me think about, yes, we have a long road

ahead of us, but, you know, generations beyond us will grow and benefit from it.

MS. MARTIN WALLACE: Absolutely, absolutely. And it is not a mistake that we have (inaudible) that are clearly shown on that tree because this is not just for present day.

MS. CAMACHO: Any questions? That was a fantastic presentation. Thank you so much, Valencia.

MS. MAR-SPINOLA: Thank you, Valencia. So, this brings us to a break. So, we'll have a brief break and come back at 10:05 pacific. Okay, thank you very much. See you in a few minutes.

(Recess)

MS. MAR-SPINOLA: So, welcome back, everybody. Let's see, next on our plate is a very exciting subcommittee section, not to say that the others weren't. But we're going to talk about Artificial Intelligence Subcommittee matters. I'm going to turn this over to the Co-chairs Jeremiah Chan and Barney Cassidy. I think, actually, Jeremiah's going to lead the discussion today.

And also, welcome Deputy Peter. Jeremiah?

MR. CHAN: Great. Thank you, Julie. All right. Well, as Director Iancu mentioned in his opening remarks, AI has really touched the myriad aspects of society throughout the United States and across the globe. The intellectual property space has been no exception. And for this, I actually want to give some kudos to our PPAC Chair Julie and the USPTO for having the foresight to create this new AI subcommittee and really give it the attention that it deserves. Really, really key, really important.

I also want to thank Laura Peter, Matt Such, and the other PTO team members who have been working tirelessly on these AI initiatives and closely partnering with us. And last, but not least, I want to thank my PPAC Co-chair Barney Cassidy and subcommittee member Jeff Sears for their excellent partnership as well.

Before diving into the agenda, I think it is worth a moment to align on terminology a bit. Thousands of articles have been written

about innovative approaches to leveraging data and computation, but the terminology has become increasingly blurred. You read enough articles and blogs and you will likely hear a handful of terms which are rarely defined and often used synonymously. Terms like artificial intelligence, AI, big data, statistics, data analytics, data science, deep learning, machine learning, predictive analytics. At the most general level, I think all of these terms attempt to convey the concept of leveraging data and computation to perform a task better. Where better connotes faster, cheaper, more accurately, or any combination thereof.

In the broadest sense, AI refers to machines that can learn, reason, and act for themselves. And after being taught by humans, they can make their own decisions when faced with new situations in the same way that humans can. So, in this sense, I know that many technology experts like our own Jamie Holcombe, don't really like the artificial in AI. Because the truth is

the intelligence is very real as you'll hear more about in this session.

Director Iancu mentioned several of the great reports on AI that the USPTO has published. One of them was the USPTO's Office of Chief Economist Report showing that the percentage of U.S. organizations and inventors that patent in AI increased from under 5 percent in 1980 to nearly 25 percent in 2018. It really is a remarkable example of the growth illustrating the importance of AI to U.S. innovation. AI has taken a center stage at the USPTO in several ways including the articulation of critical aspects of the USPTO's policy on AI and the application of particular AI tools for its operations.

And really, that's what the AI Subcommittee, the PPAC Subcommittee has been focused on, which are really thought about in two main components. One, we refer to as policy, and the other one is AI tools. On the policy front, recognizing the increasing importance of AI across a diverse spectrum of technologies and businesses,

the USPTO has been actively engaged with the innovation community and AI experts, chiefly through three major initiatives.

First, the USPTO held an AI IP Policy Conference in January of 2019, featuring IP specialists from around the world that included panel discussions on patents, trade secrets, copyrights, trademarks, IP enforcement, global perspectives, and the economics of IP protection of AI. Second, the USPTO issued a request for comments that Director mentioned in August of 2019. The RFC sought comments on patenting inventions that utilize AI and inventions that are developed by AI as well. And third, because the remarkable -- because of the remarkable recent developments in AI and how they've also impacted the fields of copyright, trademark, database protection, and trade secret law, the USPTO issued a second RFC in October 2019.

All of this great information has been posted and can be found on the USPTO's newly designed website. If you haven't visited it yet,

I would encourage you to do so. It's a very nice website that makes information very easy to find. And the website has lots of resources and information available on the portion of the website dedicated to AI initiatives.

On the AI tools front, there have been really two big initiatives that the team has been working very hard on. The first is auto-classification of patents, which leverages AI to automatically classify patent documents according to the cooperative patent classification system. And this supplements and/or replaces parts of the current practice of manual classification by contractors, and will ensure classification quality. The second major initiative is what I refer to as enhanced patent search. Leveraging AI to assist examiners in the retrieval and the efficient review of relevant prior art during the course of examination, which will directly impact and improve the quality of the patents that come out of the USPTO. And you're going to hear all the details about these

great accomplishments to date and the roadmap from Laura and Matt in a second.

Another quick note. Last night, my son and I were watching the NBA draft. The USPTO has been kind of doing their own draft and really kind of looking to identify and recruit AI experts from across the country to add to its roster, and they have done that. And I'm excited to have them talk to you a little bit about the new team members that they've added to really add a lot of sophistication and expertise to their great work to implement AI tools and truly harness the power of technology to deliver better quality and efficiency for the Office.

I'd be remiss to not mention COVID and the impact here because I really do think it's quite remarkable. Director Iancu talked a bit about it already. Particular to the AI initiatives, COVID has really not caused the Office to skip a beat. In some ways, the COVID pandemic has resulted in training and feedback loops that have -- that in some ways have been

even more productive for the collection of feedback by the USPTO.

The virtual training sessions have allowed the product manager trainers to access the examiner trainee screens. So, instead of asking them for feedback, they can literally sit down and watch the examiners use these new tools on their screens and really get good feedback around how to improve new feature roll outs and how to make the tools more accessible and easier to use for the examiners. I think it's quite a benefit and speaks a little bit to the rapid pace of progress that Laura, Matt, and the team has been able to make.

My last comment on this would be in terms of recommendations, really, we focused on two areas of discussion. One, is coordination with other agencies. Again, Director Iancu mentioned this as well. The USPTO has been working with the Department of Commerce and the White House Office of Science and Technology to address a number of the policy and implementation

challenges with AI technologies. Our hope is that we can continue to collaborate closely with them, share our best practices from the USPTO, and also learn from other agencies so that no one is duplicating efforts or recreating the wheel.

And the last piece that I have been really encouraged about is in the last several weeks, Laura, Matt, and the team, and PPAC have been meeting in depth around this concept that we call ROI, or return on investment. And it is really this kind of discipline and practice of looking at these initiatives with the lens of what are we investing to deploy these new technologies and ultimately what are the benefits that are being manifested in the U.S. Patent Office? And I'm pleased to say that the team has been making tremendous progress in this area to really kind of define and use frameworks to really quantify what are the specific benefits that these tools are bringing to the U.S. Patent Office?

So, across the board I would say just tremendous progress. I'm excited to have Laura

and Matt kind of walk through a number of these with you. And with that, I will turn it over to Laura.

MS. PETER: Well, thank you so much, Jeremiah. First, I want to thank the subcommittee and all of PPAC for all of their efforts in talking with the PTO about our AI efforts and giving us really inspirational ideas on how to move the ball on some of these issues. And as the Director mentioned and as you're going to hear more here, we've made huge strides in the area of articulating artificial intelligence policy and providing a forum for feedback from our stakeholders in that regard. And also drinking the Kool-Aid ourselves in actually implementing AI in our examination process. So, we're very, very excited for that.

So, to follow on from Jeremiah here, I'm going to first introduce to you our new technology expert our Emerging Technology Senior Leader Jerry Ma. We've spent quite a bit of time recruiting what we wanted to have with somebody best in class

who could inspire and shake loose some of our more traditional ideas and bring us a fresh perspective. So, with that, I'll turn it over to Jerry Ma to say hello.

MR. MA: Thank you, Laura, for that introduction. And, hello, everyone. It's a pleasure to be with you today. And as Laura mentioned, I joined the PTO very recently, just three weeks ago as our Emerging Technology Leader. Up until then, I was an industry technologist who's benefited immensely from the hard work of the Office. And when the opportunity arose to lend my experience directly in service of our nation's innovation community, I knew it was time to pitch in.

So far, my biggest take away is that the people here are just phenomenal. From our executives such as Laura, Jamie, and Matt, to our computer and data scientists, to our 10,000 strong examining corps. Everyone I've talked to has been brimming with ideas for how machine intelligence and other green field technologies can help us

execute faster and better on behalf of inventors.

As you know, we at the PTO are pursuing an ambitious AI agenda. Over the next few months, I'll be working closely with our ongoing AI initiatives to get up to speed on their great work and to ensure that we at the Office are benefitting from these same state-of-the-art methods used by leading American technology companies. More broadly, I'll be working with stakeholders throughout the Office to craft a holistic strategy around closing our data loops so that feedback and supervision from our examiners go straight back into our machine learning models in a cycle of continuous improvement. Finally, I'll be exploring ways by which we can marshal the public research community to help us discover novel solutions to our most pressing agency challenges.

I want to extend an invitation to our dedicated committee members to get in touch with me. Emerging technology at the PTO is a team effort and engagement with our public stakeholders

will be a crucial ingredient in delivering the technology that best advances the PTO's mission. Finally, I am happy to serve as a resource to all members who wish to dive deeper into our ongoing emerging technology programs. Once again, it's great to meet everyone here and I'm excited to work with you going forward. Thanks very much. And I'll hand it back to Laura.

MS. PETER: Thanks so much, Jerry, and welcome. I know we have an exciting future ahead with you joining the team. So, and we're looking forward to having to have more discussions with PPAC as we go along as well. So, now I'm going to turn it over to Charles Kim, who's going to talk us through the release of our AI reports. We have all of these sort of exciting reports. And as Jeremiah mentioned, they're posted on our webpage for artificial intelligence on the website. You can go to the home page. There's a blue ribbon in the middle, USPTO.gov. Go to the blue ribbon in the middle, click on artificial intelligence, and you're going to see the AI reports that Charles is

going to talk to you about next. Charles?

MR. KIM: Thank you, Laura. I'll just wait for the slides to come up on the Webex. All right, great. So, good afternoon, everyone. As Deputy Director Peter indicated, my name is Charles Kim, and I'll be providing you with a brief update on two recently published reports on AI that Director Iancu mentioned in his opening remarks and that Jeremiah alluded to earlier.

The first report takes a comprehensive look at a wide range of stakeholder views on the impact of AI across the IP landscape. The report is an outcome of the USPTO's active engagement with our stakeholders to ensure that appropriate IP incentives are in place to encourage further innovation in and around this critical area. As Jeremiah mentioned, these engagements include the AI IP policy conference that was held in January of 2019 at our Alexandria, Virginia headquarters, as well as the two requests for comments that we issued last year.

The second report takes a look as U.S.

Patents to determine the diffusion of AI. That is, the spread and adoption of AI across technology areas, inventors, companies, and geographies. And as Director Iancu indicated, this determination of AI diffusion was done using AI technology.

Next slide, please. So, before I get into the details of the first report, I'd like to briefly discuss the two requests for comments that we issued last year. In August of 2019, we issued a request for comments seeking feedback from our stakeholders on a variety of patent policy issues such as AI's impact on inventorship, patent eligibility, and the disclosure requirements of an AI invention, and the impact of AI on one of ordinary skill in the art. In response to the request for comments, we received almost 100 unique comments from a broad range of stakeholders including foreign patent offices, foreign trade associations, individual inventors, and companies in various industries.

Next slide, please. Shortly after we

issued the request for comments on patent policy, we issued a second request for comments on other IP policy areas, such as copyright, trademark, database protections, and trade secret law. Similar to the first request for comments, we received approximately 100 comments from a diverse group of stakeholders.

Next slide. Following the conclusion of the comment periods for the two requests for comments, a team of AI policy experts from across the USPTO under the leadership of Deputy Director Peter, carefully reviewed all of the comments and generated a report that was published last month. This report, which is titled, Public Views on AI and IP Policy, is divided into two parts that correspond to the two requests for comments. The report provides AI context and legal background, and it synthesizes the public comments for each of the questions presented in the two requests for comments.

I'll briefly highlight some general themes that emerged from the comments. And I'll

also discuss some themes specific to patent policy from Part 1 and themes relating to other IP from Part 2 of the report. So, starting with the general themes, the majority of comments indicated that the current U.S. IP legal system is well equipped to handle the emerging issues raised by AI. But these comments indicated that the USPTO and IP stakeholders should closely monitor legal and scientific developments in AI to ensure that the U.S. maintains its leadership in this critical technology.

Many comments also noted that AI has no universally recognized definition and due to the wide ranging definitions of the term, commentors urged caution with respect to IP policy making that's specific to AI. The majority of comments also suggested that current AI systems are not yet capable of inventing or authoring without human intervention. And the fact that human beings remain integral to the operation of AI, it's an important consideration in evaluating whether IP laws need to be changed in view of the current

state of AI technology.

With respect to patent policy, a majority of commentors agreed that AI is a subset of computer implemented inventions. And, therefore, the USPTO's existing guidance such as the Patent Eligibility Guidance, or PEG, and 112 guidance relating to computer implemented inventions, as well as the MPEP, of course, are relevant to AI inventions.

Regarding other IP themes, again, the majority of comments stated that current IP laws are calibrated correctly in the copyright, trademark, and trade secret fields. Many agreed that existing commercial law principles such as contract law may fill any gaps that may be left by IP law due to advances in AI technology. There are several other themes that emerged from the comments and those themes are identified in the report. But in the interest of time, I'll move on to the second AI report.

Next slide, please. So, our Office of the Chief Economist recently published a report

titled, Inventing AI. This report examines the presence of AI in U.S. patents from 1976 to 2018, and it looks at it in a multiplicity of ways including its growth over time, the spread of AI across specific technology areas, the geographic dispersion of AI related patents, and the distribution of AI patents granted to individual inventor-patentees and organizations. The report defines AI inventions as those falling into one or more of eight component technologies, including AI hardware, evolutionary computation, knowledge processing, and machine learning, to name a few.

And as I noted earlier, this is a report on AI that used AI as a research tool. Specifically, machine learning was used to predict whether a given patent document contained an AI component technology. Some key findings of the report are that AI is increasingly important for invention and it is spreading and being adopted broadly across technologies, inventor-patentees, organizations, and geography. For example, the report found that patents containing AI appeared

in only about 9 percent of technologies in 1976 and spread to more than 42 percent by 2018. It also found that the percentage of inventor-patentees who were active in AI started at just 1 percent in 1976 and increased to 25 percent by 2018. And while inventor-patentees between 1976 and 2000 tended to be concentrated in larger cities and technology hubs, the report found that from 2000 to 2018 there was a clear diffusion of AI into other areas of the country, especially in the Midwest. Lastly, the report found that annual AI patent filings increased by more than 100 percent since 2002.

Next slide, please. So, both of the reports that I just discussed, as well as the two requests for comments and the approximately 200 responses to those requests for comments are all available on our AI webpage. In addition to these resources, are other helpful resources relating to AI that can be found on this webpage. So, if you haven't had a chance to take a look at our AI webpage, I would encourage you to do so.

So, that concludes my presentation. I'm happy to answer any questions.

MS. PETER: Very good. I don't hear any questions at this point. So, Charles, thank you so much. As you can see, we've achieved a lot this year and in publishing some of these important policy reports and also the AI Patent Landscaping Report, which we're very excited about and, of course, it's just been issued.

Now, we're going to turn to the tools side. And we've made tremendous progress there as well. So, I'll turn it over to Matt Such to give you the details.

MR. SUCH: Thank you, Laura. And thank you to the subcommittee for your engagement over the course of this year. I think that a lot of the efforts that we've undertaken certainly benefitted from our interactions together with the subcommittee. And I think there is a slide deck that should say Patents Artificial Intelligence Tools. Thank you. Okay, we can move forward.

So, I'm going to cover some of the

milestones that we reached during the last fiscal year and as Jeremiah mentioned on the onset, talk about our steps forward for the next fiscal year on our search efforts and auto-classification efforts. You can move forward two slides, please.

What you see before you here is a screenshot of the artificial intelligence tool that interacts with our next generation examiner search tool. And the value proposition here is to improve patent quality through enhanced search. The important thing to note here, although there's a lot of detail on the screen, is that as the examiner does their search, the AI system has been designed to help them with the review and retrieval of documents.

You can move to the next slide. The last fiscal year was quite amazing in terms of our progress. I do want to commend our technical team. They were able to go from the kickoff to build the infrastructure as well as our AI prototype in a four-month period, which was quite remarkable. And that enabled us to enter into an

assessment period with our user center design council where we test out and obtain feedback on different capabilities. And I'll share some of the highlights of those results now. If you can move to the next slide.

So, this data shows some of the capabilities and how our users felt that they provided value. So, for both of these, these are ways that the examiners can use to sift through documents that result from a search or use artificial intelligence to actually retrieve documents in their search. And in both cases, our users were reporting that they were finding positive results for being able to sift through documents more efficiently, as well as find prior art relevant to the claim subject matter.

We can move forward to the next slide. And these results provided some very interesting insight into how our users perceived the tool overall. A majority agreed that the enhancements that AI provided was more enhancing to their search than traditional search methods without the

artificial intelligence. And we were very encouraged by the data on the right, which shows that over 30 percent of the respondents felt that they were able to retrieve prior art that they would not have otherwise been able to discover without the assistance of the AI features.

So, if you could move forward. Based on the results we have gotten out of our user center design council assessment, we are moving forward to operationalize these capabilities and expand access to these capabilities to a wider set of examiners during fiscal year '21. This is something that is linked with our next generation search tool as part of the capabilities for that search tool. And we will be moving forward over the course of this fiscal year. Additionally, there are some additional prototyping for more advanced features that are currently under development that we will continue to move forward with during this fiscal year.

And I can move forward two slides and I will discuss the auto-classification efforts. Our

auto-classification efforts, the value proposition is around improved quality, as well as operational enhancements and reduced costs. Our system has been designed to apply CPC symbols to patent documents, as well as identify claim subject matter.

You can move forward to the next slide. In fiscal year '20, we took an approach of doing an iterative assessment and refinement by obtaining feedback from experts and used that process in order to make improvements to the AI models that drive the system. When we reached the middle of the fourth quarter, we found some very interesting results, the ability for the system to provide value for our claim indicators that we use for our internal operations.

If you can move to the next slide. So, this is some of the information retrieval metrics that we've obtained with our claim indicators capability and has found that it is very competitive with the historical application of these claim indicators on our patent documents.

And based on this information, if you can move forward, we are moving to operationalize the auto-classification of our claim indicators to help us with the quality of those claim indicators, as well as our operational efficiency.

In addition, during fiscal year '21, we'll be continuing to monitor the ROI of that particular program and that application of that program. And further develop and improve the models that are being used for the full classification of assigning CPC symbols to documents.

So, with that, I would like to thank everybody, and if there's any questions, we certainly can take those now.

MR. LANG: This is Dan Lang. Great presentation. You know, it looks like great progress on all fronts. Can you talk a little bit about -- excuse me -- about the user interface the examiners would see in a next generation search tool? Is it going to be similar to what they've experienced in the past? Is it going to require

significant retraining? What can be said about that?

MR. SUCH: Sure, so, the next generation tools were designed to be able to provide the same capabilities that the examiners have in their legacy systems, and also provide some additional features of which artificial intelligence is one of them. Certainly, there is a training aspect to that, that we are supporting our examiners with, particularly for any new features. And as we've moved forward with expansion of that tool, we also gather feedback from our users to help to improve training materials and to improve the systems as a whole.

MR. CHAN: I think it's a really good question, Dan. And it probably (inaudible) from your own experience of deploying new tools with your teams. You know, I think as Matt mentioned, the team has focused quite a bit on the integration of these new features into existing workflows. And so, for enhanced search, for instance, that will be baked right into their

current PE2E system so they're not having to like learn a new tool, go outside their current workflow. It's all built-in. And some of the prototype snapshots that I've seen from Matt and Laura it seems like the transition should be very, very smooth. Not a whole lot of learning curve for them to get up to speed on some new different tool.

MR. LANG: One follow-up question. Thanks for that, Jeremiah. How do you see the next generation tool enabling easier searching of non-patent literature? Is that a phenomenon that you can already see in testing? Is it something that we can expect that examiners are going to more easily find references that are not patents? I mean, I ask because I think we all realize that it's been a significant challenge for the patent searching process to be able to capture the world of publications that exist outside patent documents.

MR. SUCH: Certainly. So, we agree that having a federated search tool to be able to bring

in both patent forum and non-patent literature sources into a unitary system is the gold standard for search capability. Right now, the way that the artificial intelligence system and our new systems work depend on the libraries of patent documents that are made available to that system to access. There are a number of challenges that the Office would need to overcome in order to implement non-patent literature into those systems. And certainly those are things that the Agency is looking at ways to be able to move forward with. But as of right now, the system does not currently use non-patent literature sources in the system.

MS. CAMACHO: Matt, this is Jennifer Camacho. Thank you very much for that presentation, terrific. We do have a quick question from the public. And that's whether the AI search tools are going to be made available to the public?

MR. SUCH: Yes, certainly. That's a question that we get quite frequently when we have

talked about these AI search tools, and this is something we're looking at very carefully. I would note that there is a dependency on the availability of the AI capabilities in the PE2E platform with the availability of the PE2E platform itself being made available to the public.

MS. CAMACHO: Thank you.

MS. PETER: So, this is Laura. Matt, thank you so much. I'll just kind of follow-up on that question. You can see these tools are maturing a lot and we're very, very excited to be rolling them out to a broader group of patent examiners and perhaps the whole patent corps. I don't think they're ripe enough to go out to the public and we're still in this evaluation stage. But it's certainly a question that we're going to keep on the radar and follow it as we go along, especially in this coming year.

So, with that, you know, this particular PPAC subcommittee, AI Subcommittee, has been very interested in what we've been doing with other

agencies. And, of course, artificial intelligence policy and tool making is not solely the purview of the United States Patent and Trademark Office. And we have been following what other agencies have been doing very, very closely. And I'm going to turn it over to our expert in this area, Chris Hannon, to give a quick summary on what we're doing with other agencies around the federal government and around the world.

MR. HANNON: Yes, great, thank you, Laura. As Laura mentioned, I'll just plan to give the herculean task of sort of giving you a sketch of the U.S. Federal Government landscape of projects and sort of how as relevant the PTO is fitting into those projects. So, I think if we just turn to my first substantive slide, please.

You'll see here that the starting point that I'll bring us to is the AI for American Industry Summit. This was summit convened back in May of '18, bringing together government officials, AI researchers, industry officials, to sit down and discuss what policies the U.S. Would

need to realize AI's potential, and specifically, what policies are needed to maintain the U.S.'s leadership in the age of AI.

And so from that, one of the takeaways from the American Industry Summit was the formation of a select committee on AI. And so, the select committee effectively establishes this group that will advise the White House on interagency AI R&D priorities. It's tasked with establishing structures to improve government planning and coordination of AI R&D efforts and also to identify opportunities that exist of all the wealth of federal data that exists across the USG and also computational resources that the federal government has to support this AI R&D ecosystem.

So, specifically, this group is chaired by the White House Office of Science and Technology Policy, or OSTP, as you'll here me refer to it. But it's also co-chaired by the National Science Foundation and the Defense Advanced Research Projects Agency, DARPA. From

the select committee, the next major hallmark we've had so far here is the release of the American AI Initiative. This was the February 2019 Trump Administration release via executive order that identified six pillars with which the government was to focus. Those six pillars are investing in AI R&D, unleashing AI resources, removing barriers to AI innovation, training an AI ready workforce, promoting an international environment supportive of American AI innovation and responsible use, and lastly, to embrace trustworthy AI for government services admissions.

And so, now the question is now that we have the executive order, how do we implement these pillars? And one sort of workhorse that we have here in the Federal government is through the National Science and Technology Council sort of nested underneath the Office of Science and Technology Policy, OSTP, there exists a machine learning and AI subcommittee. And that's based on fostering interagency coordination, providing technical and policy advice on topics related to

AI, and to monitor the development of these technologies across industries throughout the research communities, as well as those efforts underway in the Federal government.

And so, PTO actually participates in the MLAI to ensure that IP equities are well represented in any interagency discussions that go on within the MLAI subcommittee. Another recent federal development has been the formation of the National Security Commission on AI, or the NSCAI, as you may hear it referred to. The NSCAI is an independent commission formed by Congress to consider methods and means necessary to advance the development of AI, machine learning, and associated technologies by the U.S. to comprehensively address the national security and defense needs of the U.S. So, those six pillars that I recited from the executive order, I think, maybe one aspect of that was national security and Congress has actually devoted this commission to study this issue. And again, the PTO is very fortunate to have staff detailed to the NSCAI

ensuring that that body's recommendations as they come down will fully contemplate the relationship of IP and innovation TAI in the national security defense context.

The last item I'll mention here on this slide is this project of the Administrative Conference of the United States. They have an AI project. The ACUS is the independent federal agency charged with convening expert representatives of the public and private sectors to recommend improvements to administrative processes and procedures. So, the AI project of ACUS is specifically looking at the role that machine learning and AI may play in any federal agency adjudications, any agency rule makings or other regulatory activities. If you're going to apply AI, that's sort of the work and focus of this particular group.

So, the next slide, please. So, that's sort of a domestic level of what's been going on. Very rapid, I know, but there's a lot there. The next thing I'd like to turn to is to discuss the

international AI efforts that the PTO has been involved with. And the first thing you see here is to mention the Organization of Economic Cooperation and Development. This is the multilateral forum of 37 developed nations. The United States federal level has been very actively involved with the work of the OECD's AI efforts. And in particular, back in May of last year, the OECD published its principles on AI that is to promote AI that's both innovative and trustworthy and also putting a pinnacle on respect for human rights and democratic values.

And so, our office here at the PTO has actually been involved in sort of working with the State Department, reviewing those drafts to make sure that their -- all our IP equities are protected adequately in any released statement from that. But that statement from the OECD has actually gone on and been adopted by the G20 and the G7. So, that's a interesting statement that's out there for anyone interested in those ethical democratic value type principles behind AI.

The next item you see here is the work of the World Intellectual Property Organization. They've been having "conversations" on AI. And these discussions have investigated the policy ramifications of AI specifically on IP rights and as well as the applicability of AI to the IP office administration functions. And so, today there has actually been three such of these conversations, and they were all sort of carried out under the vision of WIPO's previous director general. There is now a new director general at WIPO. And at the most recent third conversation that took place earlier this month, there's actually a plan now to continue with the conversations, but there's a sense that I think under the new leadership of WIPO will actually trend more towards how do we apply AI to more practical uses rather than sort of these theoretical artificial general intelligence type discussions that to some extent had been playing out there. But as always, the PTO will continue to participate in those discussions.

The next thing you'll see here is the work of the IP5. You'll recall, of course, that the IP5 is the world's largest five patent offices comprising U.S., China, EPO, Korea, and Japan. In 2019, the IP5 formed its new emerging technology, or NET AI Task Force that was intended to advance the five offices' cooperation in these areas. The first meeting of the IP5 and the AI Task Force took in January of 2020, right before the pandemic really took hold. And from that particular work, we actually ended up doing, effectively, sending out a roadmap to figure out which projects that we'll undertake in those -- in that forum.

Very briefly, I'll just also mention here that the OSCP has stood up a new AI R&D collaborative working body with the UK. So, the USPTO has a representative on that panel, and we look forward to working on that project. But that's a very rapid fire discussion of all that we've got going on across the federal government. Thank you.

MS. PETER: Thanks, Chris. I know we're

running over. That was a whirlwind around the federal government and around the world on what we're engaging with as far as intellectual property and artificial intelligence. So, thank you very much for that. And with that, I'll turn it back to Jeremiah for any other comments or questions.

MR. CHAN: Thank you, Laura. Thanks, Chris. Julie, I know we're running over time. So, not sure if we can still do Q&A or we should probably move on, I'm guessing. You're on mute, Julie.

MS. MAR-SPINOLA: Thank you. I was just going to say I learn after every meeting or during every meeting how much more time I wish we had for each of these sections. And, certainly, AI is so important. So, running behind but getting this very important and interesting information is very helpful. So, thank you, Christian and Matt and your whole team, Laura. This is just great. So, but I do think that we need to move on.

I want to say though, as I mentioned

earlier, that we have had very good viewership. And I want to just tell you that we're about 230 plus folks on. So, this is great. There's great interest. And I'm going to ask that they all stay on, and I especially want to give a shout out to our attendees. So, let's move on, if you don't mind, over to IT. And I'm going to hand it over to our Chair of the Subcommittee Mark Goodson. Mark?

MR. GOODSON: Good afternoon or good morning, wherever you're at. I'm going to start by telling a story. It's about my brother. He had a car growing up. It had good tires, good suspension, good wheels, seatbelts, belts, everything, but the car was most unreliable. Hold that thought. In psychiatry, there is a function. It's called a Gestalt disorder. And a Gestalt disorder occurs, as an example, someone had a stroke and their body physically heals from the stroke. They don't have dysphasia. They can talk well. They don't have a noticed problem with their gait. They walk well. Their arms move.

All their parts work. You can imagine a choir director with Gestalt disorder and that's what I'm going to tell you about.

This choir director, if you tell him to be at the church the next morning, he'll be there. If then you told him to direct a certain piece, he would direct it. And if you told him to play the piano, he could do that. But he can't put all the parts together if you told him the night before you got to do all these things. He couldn't do them. That's the nature of the Gestalt disorder. And that's what was wrong with my brother's car, always in the shop. It was always in the shop because he was always wrecking it.

Having said that, my opinion the IT group at one time had kind of a Gestalt disorder. Look at the key players in the IT group. They're all workhorses. I won't mention them by name. There's too many, but they're all good. They're all very, very intelligent people. They work very hard. I can't say enough good things about them. And yet, there was this lacking of someone in an

executive function. The IT group, look at them. It's the same people as there before, with one exception, and that's the top executive, Jamie. I cannot say enough good things about Jamie. He's, you know, he's a man that plans his work and then works his plan. Academy graduate from West Point. He knows how to lead. He has developed an esprit de corps in that group that's just unheard of.

He's developed -- he's gone with the Agile plan for software. No longer do we hear excuses about why things can't be done. You give him a problem, he tells you it will be solved, and it's solved.

In terms of the annual report, you know, he's worked on stabilization of the system. Teleworking was already pretty perfected. It's even more perfected now. I've already mentioned Agile. We are moving away from PAIR to the Patent Center. Then there's this issue of resiliency, which really hadn't been addressed adequately the last several years until Jamie got onboard.

So, Jamie, I'm going to turn it over to

you. You are a most capable individual, a true leader, and I know everyone that works in the IT group they follow in your footsteps and they do so quite willingly. All yours.

MR. HOLCOMBE: Well, thank you so much, Mark. I am humbled by your kind words. I will say that it is a great competent group that we have and the resiliency that you spoke of is exactly where we're prioritizing our work for the coming year. In fact, we're going to try to be resilient out in the Cloud. And what that means is we're going to actually create modern applications like the Patent Center and be able to use those out in the Cloud securely with what I'm calling the zero trust architecture.

Now heretofore, we've done a lot of great work in cyber security. And we do have remediated all of our vulnerabilities, but with constant vigilance, we are going to actually improve and move out onto the Internet in a zero trust architecture. So, there's more to follow on those great words, but I tell you what, I couldn't

do anything if it wasn't for the great team that we have behind us, the horsepower that you talked about, that's so competent and good. Thank you very much.

MR. GOODSON: We're ready for slides?

MS. MAR-SPINOLA: Mark, I believe Debbie Stephens will be presenting. Is that correct, Debbie?

MS. STEPHENS: I'm actually going to turn the talking baton to both Bill and Raman for this afternoon. Thank you.

MS. MAR-SPINOLA: Thank you. So, do we have Bill online?

MR. GOODSON: Bill, you're on mute. Bill, you're on mute.

MS. MAR-SPINOLA: Maybe check volume?

MR. STRYJEWSKI: Can you hear me now?

MS. MAR-SPINOLA: Yes.

MR. STRYJEWSKI: I'm so sorry. Hi, I'm Bill -- I'll start again. Hi, I'm Bill Stryjewski from the Patent Product Line. And to build on the opening remarks that both Mark and Jamie

mentioned, I'll be talking about two new systems that we're in a roll out phase that are meant to replace aging systems where resiliency is a cornerstone of them, and also expandability. Not only providing something that is going to be more resilient to support the data operations, but to build upon and to improve upon over time.

So, without further ado, if we can go to the next slide. So, PE2E Search is our replacement search system. So, it is our next generation search system for the examiners that conduct prior art searches. Our legacy search systems EAST and WEST were actually established in 1999 and 2000. We're replacing all the features that the examiners have used over those almost 20 years to find prior art and we're providing additional features for them to find that prior art effectively and efficiently so we can have -- we can issue quality patent applications.

The current status of the program is that we've rolled it out to 1,000 examiners and we've trained them and we've gotten a lot of

positive feedback. We're continuing to grow the amount of foreign office collections to them. So, we've increased with dozens of additional countries and almost 40 million documents. And in doing so, we are providing not only the actual documents themselves, all the documents, the complete documents, not just an abstract, but also an English translation of all those documents.

Our next steps are to continue to roll out the search tools to the examiners so all examiners are going to get the tools and be trained on them. We're going to ingest another almost two dozen of the countries. And to Matt Such's previous presentation, we have a plan in FY21 to integrate the artificial intelligence base feature into the search tool, therefore, kind of giving a comprehensive one user interface to find prior art effectively and efficiently.

And obviously, increasing the foreign data allows for examiners to hopefully find prior art effectively and efficiently. And AI is going to assist in hopefully sifting through the large

amount of collections over time. Does anyone have any questions about PE2E Search?

Okay, Patent Center. So, Patent Center, as Mark mentioned initially, is a replacement for two our core externally facing tools. EFS-Web, our filing tool, the way applicants submit patent applications and responses to patent applications, and the PAIR system. The PAIR System provides reviewing and managing your patent applications. So, we actually spent -- send out on the 75 percent of our correspondence goes out electronically through the PAIR system. So, what we're doing is we're building a single user interface in Patent Center to kind of help manage both the ingoing and outgoing communications with the Office in a single environment.

We have a Patent Center beta out there which you can submit real applications at this point in time and manage your applications. So, we're trying it. We're keeping the legacy systems out there. We want you to kind of look and try to adapt to the new systems because they're built on

much more resilient infrastructure and it will allow us to kind of continue to add features and technology, features to the stack, which could hopefully make your user experience better and your experience dealing with the USPTO better.

Currently, we've trained 5,600 end users since April. We're receiving positive feedback. We've been addressing defects and user feedback on the way we would receive DOCX filings. So, DOCX filings are text filings of applications. Our intent there is that with the actual text provided by the examiners -- I'm sorry, provided at the applicant level where the actual applications are created, we would be able to leverage that through prosecution, provide that to the examiners so they could more accurately understand what their use. Maybe have automation associated with it to help determine not only the prior art that's related to it, and hopefully maybe help with data capture down the road and improve publication. So, we have a grand scheme of trying to manage a much more text-based file wrapper to improve

prosecution and the quality of patents.

We're continuing to add the features that have not fully been done in Patent Center. So, there are some supplemental examination and additional ePetitions. An ePetition is where you go on and we actually decide the petition based on the facts that the user has entered into the system itself.

Our next steps with the system is to continue with the functionality. A lot of self-service based functionality. If you have changes to address or entity status. Again, this is something you can do online as opposed to providing a form and then waiting downstream that the form gets processed. There is also additional filing types or ePetition types. The Hague International Design, third party submissions. So, some of these smaller, we get less filings of these. So, we've kind of handled the major filing types initially, and now we're kind of going through the backlog.

Again, we want to build a better system

to have better user experiences. We've kind of hit our peak with respect to technology on the aging system. So, we really kind of want the public to kind of use and embrace this tool and provide us the feedback so we can make sure it's the best tool for you.

Any additional questions on Patent Center? Thank you.

MR. SARNA: Hi, good afternoon, everyone. Sorry, fooled by the double mute button. To ensure that the Agency's infrastructure remains resilient as well tolerant, the data centers are being modernized and relocated from Alexandria and (inaudible) respectively to Manassas and a secondary location that is yet to be determined.

This migration will provide an approximate 60 precent reduction in the footprint. The ability to dynamically provision and reduce assets through automation and DevSecOps, as well as greater throughput and performance. In terms of the current activity, the award for the primary

site in Manassas occurred in August of this year. The actual migration work itself is scheduled to begin in March of 2021 and will take approximately 12 months to complete.

The teams are currently focused on current site discovery, which is validating the existing inventory, mapping the applications to the equipment, as well as the design of the new site. And that work is approximately 50 percent complete. The migration strategy that the Agency has adopted is to establish feed infrastructure at the new location, move over the high priority applications with no or minimal downtime, and then move the applications -- move the equipment, excuse me -- that still has good life from Alexandria to augment the initial capacity in Manassas.

From a security posture perspective, the vendor has self-certified their compliance with NIST protocols and obviously, the Agency is doing its due diligence and conducting a security assessment prior to issuing the authority to

operate. The next quarter's plans are to complete the site assessment and migration planning and then begin execution of the relocation plans.

Any questions on this topic? Thank you.

MR. GOODSON: Jamie, I can't say enough good things about your group. This is Mark talking. Same players as before, just remarkable progress and thank you very much.

MR. HOLCOMBE: You're more than welcome, Mark. God's speed.

MR. GOODSON: Thank you, sir.

MS. MAR-SPINOLA: Okay, so, Mark, we -- does that complete the IT section presentation?

MR. GOODSON: Yes, it does. Yes, it does.

MS. MAR-SPINOLA: Well, thank you for bringing us almost back on time. Much appreciated. The information are always useful and so, thank you to everybody in the IT subcommittee.

So, we're going to move on now to international and the chair of International or

the co-chairs are Tracy Durkin and Jeff Sears. I believe I'm handing this off to Tracy. Tracy?

MS. DURKIN: Yes, Julie. I'm here.

MS. MAR-SPINOLA: Thank you.

MS. DURKIN: You really picked up speed there. I hope I can keep it going. All right, so, I want to -- I'm also going to give some highlights from the 2020 Annual Report. And I wanted to just start by pointing out that there are two parts of the Office that the International Subcommittee interfaces with and that's the Office of Policy and International Affairs. And since we like acronyms in the government, I'll refer to that as OPIA. And also the Office of International Patent Cooperation, which is OIPC.

And so, as we know, COVID-19 has affected the Office in so many ways not the least of which has been the inability of members of both of these groups to travel and meet with their counterparts around the globe and to keep up with important projects and keep them moving forward. But despite these challenges, the Office has

maintained its leadership position across the globe and collaboratively developed virtual meeting opportunities and protocols that, frankly, may change the way we work together with our counterparts or at least the Office counterparts in the future in terms of not just time, but money spent on global travel.

One significant international meeting that was actually supposed to take place in Alexandria was the Office was going to host the annual meeting, rather, of the ID5. The ID5 brings together the heads of the five largest IP offices in terms of the number of design filings made each year. Sadly, that meeting didn't take place live, but it did take place virtually just last month. And we'll hear more about that shortly as well as the virtual meeting of the IP5.

Similarly, there are ongoing projects in which the Office worked collaboratively with WIPO, JPO, the KIPO, KIPO, the Mexican Institute for Industrial Property, and many others. And this work we're pleased to say continued uninterrupted,

really, during these precedented times.

The PPAC wants to commend the Office on the collaborative work with these and other IP offices to increase the certainty of IP rights and reduce the cost for international stakeholders.

Finally, I want to mention before I turn it over the Office's IP attache program. We tried to shed some light on this again this year. This is a really valuable resource that the public really needs to be aware of. It's located within OPIA and it continues to effectively advocate for the improvement of IP systems around the globe. And more importantly, to support U.S. individuals and businesses with IP interests worldwide. The U.S. industry has expressed support for the attache program and requested elevation in diplomatic ranks for the attaches in order to improve their effectiveness in their interactions with foreign government officials. And again, the PPAC supports this request.

With that, I want to turn it over, I believe, to Acting Chief Policy Officer and

Director for International Affairs Mary Critharis, who by the way, congratulations on your appointment to that position. And I believe Dan Ryman is also with us. They're going to give us an update on the work of OPIA and OIPC since our last meeting and hopefully we will also get a preview on what's to come in 2021.

MS. CRITHARIS: Thank you, Tracy.

MS. DURKIN: Mary?

MS. CRITHARIS: Can everybody hear me?

MS. MAR-SPINOLA: We can.

MS. CRITHARIS: Okay, fantastic, great. First, I just wanted to say that along the lines of what Tracy mentioned, we are really trying to maximize our virtual platforms in order to keep up with our international meetings and our international dialogues with foreign colleagues. We have learned that in some ways these international meetings in virtual platforms that we're using allow for enhanced participation. So, we went into meeting where we only had maybe 30, 40 participants in a particular region, and now

because it's a virtual program, we're doubling or even tripling some of the participants. So, that's great news.

Going forward, we're, as Tracy mentioned, mindful of two of the resources. We will be trying to employ a hybrid approach where these are on virtual platforms but admittedly for some of the meetings, a virtual platform is not a real good substitute for some of the in-person discussions that we have with our colleagues. So, we will be mindful of that and we are exploring with the OCIO, you know, platforms that are obviously stable and secure for the future.

So, with that we'll go to the next slide, please, and show you what we will be discussing today. So, we're going to give you a brief update on some of our work sharing initiatives. We have some new work sharing agreements that we're going to be unveiling so I wanted to share that with you all. Also give you a brief overview of some of our upcoming international meetings. And as Tracy mentioned,

give you a summary of the recent ID5 meetings that we hosted last month.

Okay, so, for the new work sharing agreement, in October we announced a new patent validation agreement with the IT office of Cambodia. And this is a validation agreement where if a U.S. application is issued, you can take that patent to the Cambodian office and they will issue and they will validate the U.S. patent and issue a Cambodian patent based on the U.S. Patent. This is maximizing work sharing and reliance on our work product. That program was -- that agreement was signed in October. Cambodia is still working out some of the processing on their end. So, we hope that that'll be in effect very soon.

The next work share agreement we have is a parallel patent plan agreement with Mexico. I think we may have mentioned this briefly in our previous session, but just to give an update. This is also building on some of our existing work sharing programs. But this is a program that will

maximize the reliance of the work product in the USPTO. This is more of a collaboration program between USPTO and the Mexican patent office whereby we will work together to identify patents that were issued by the PTO, which also have a corresponding application filed in Mexico. And once we send over and identify those applications, the Mexican office will then do a very simple formalities check. They will check for subject matter eligibility given there's some differences in the law. And the goal is to have a issued patent in Mexico within 60 days.

So, building on these new concepts and work sharing, going to the next level, we are going to explore developing some of these work share agreements in other jurisdictions as well. We'll focus our validation efforts on some of the smaller regions. Southeast Asia and North Africa have expressed some interest in these validation type agreements. And we're hoping to really leverage the collaboration with the Mexico agreement, which also is expected to launch in

December. This got delayed due to COVID because there's some IT infrastructure that needed to be employed on both sides.

So, we're really thinking about ways to take the PTH, leverage all of the results and the experiences from those agreements and go into a next level, which even really maximizes the work sharing agreements that we have. So, before I turn to the other portions of the presentation, maybe we'll stop if there's any questions on work sharing.

Okay, then why don't we turn to the next slide, please. So, I just wanted to give a real highlight of some upcoming meetings. These are all going to virtual meetings. But we are fully engaged and even though, again, we're missing some of that interaction with our foreign colleagues, we will be hosting a heads of office trilateral meeting in early December. We actually did have the trilateral meeting on Monday of this week with industry. So, we will take the feedback from the industry and fold it into the trilateral meeting.

The trilateral meeting is the heads of offices of the USPTO, the European patent office, and the Japan patent office.

There's several meetings in WIPO coming up in the next month. We have the Standing Committee on Trademarks, Designs, and Geographical Indications. We will be participating, David Gerk, from the patent team will be participating in that meeting that will be next week. Some interesting topics on graphical user interfaces will be discussed at that meeting. The upcoming meeting on the Standing Committee on the Law of Patents will be the second week of December. And then the Working Group on the Hague Agreement will also be December 14th to 16th as well.

We will have a Group B+ meeting. And for those who are not familiar with the Group B, Group B+ Forum, this is the forum that was established back in 2005 to discuss harmonization among like member countries. We wanted to have a forum that we could make some progress on harmonization, really focusing on prior art

related issues, first to file, consistency, and grace period in conflicting applications, publication of applications. So, we've been meeting on and off with this forum for a long time.

We were waiting for feedback from industry on next steps. So, at this Group B+ meeting, industry will be going through some of their proposals for how to make progress on harmonization. So, for the most part, for this meeting we'll be in listening mode.

Okay, next slide, please. Okay, so, I just -- this is the ID5 summary. We were not able to host this in person. We were really upset about that because this was the fifth year commemorative celebration of the launch of ID5. ID5 was started back in 2015. It was actually our idea to launch this forum. The ID5 industrial design issues were part of the TM5, the trademark forum. But we felt that we needed a separate forum to really make sure that the issues were adequately and sufficiently addressed. So, you

can see here we hosted the first meeting and then China and then Europe and then Korea and then JPO and then back to us.

Next slide, please. So, what are the goals here? The goals here are very similar to some of the other multilateral fora that we have established. We wanted to develop a really specific design specific mechanism for implementing global best practices that are helpful to the U.S. innovative design industry to make sure that it's easier for them and efficiently for them to protect their designs around the world, recognizing there are very different practices. So, the goal was to see if we could harmonize some of those practices, identify some deficiencies that needed to be addressed, but make it simpler and easier for the users to obtain, you know, global design protection.

Next slide, please. So, we're showing some of the objectives that we have in this forum. We want to make sure that we have effective design

protection in all technologies. This is obviously a critical component to all of our international discussions. As we're seeing, we want to make sure that there is adequate protection for graphical user interfaces, as well as for designs in virtual and augmented gig reality. We also are trying to make sure that we improve consistency in examination policies and practices. Again, consistency, simplicity in filing in other countries makes it easier for all of the users to obtain global protection, but we also want to identify the needs and challenges of the design community through stakeholder outreach and information sharing.

And on this point, I do want to take some time to note that we were not able to have a user component to the ID5 forum. We typically have a user component, but unfortunately, given the timing and the technology, we weren't able to do so at the past meeting in October. But we are trying to have a more dedicated session, hopefully in January, February that would just be a USPTO

led Webinar where we could consult and interact with our stakeholders and we can give more specific, you know, updates on the project and also hear back on what your concerns are so that we may better address them. We realize the PPAC is, you know, is a great forum for, you know, communicating some of our work and our achievements, but we really want to have a separate forum to work directly with some of the design user community.

So, next slide, please. So, here I just wanted to highlight some of the achievements. I mean, this forum has only been around for five years, but we've made tremendous progress. I think that is due in part to the fact that we've had tremendous experience. And we launched this platform to build on IT5 and TM5. So, within, you know, the first year or two, we started implementing an electronic priority document exchange system that is now adopted by all of the offices. And my understanding is we've received a lot of positive feedback, especially during the

pandemic that it was easy for applicants to get, you know, priority documents and not have to have to worry about sending them to the offices. So, that's a real success, a tangible success for this group.

We were also able to make some progress on the design formalities, harmonizing some design formalities. Unfortunately, there's not much progress at WIPO on the DLT, which is the design law treaty. We have a PLT and TLT, but due to some other political considerations, DLT is not going forward. What was nice is that we were able in this group to achieve success by agreeing on the design formalities that are set forth in the DLT. And these design, you know, practices are not just to be used by the ID5, but it set the stage to the rest of the global community that these are best practices for handling design formality issues.

We've also completed over 16 projects and studies to simplify processes for applicants all around the world. We've also prepared some

reference manuals. All of these, the design practices, the projects, the comparative studies, the manuals, they're all available on the ID5 website. And I will say that when we regroup and we go through these projects, one thing that I think is important to point out is, you know, what are the benefits to USPTO directly? But it constantly forces us to reevaluate some of our own domestic systems and this is where some of the domestic policy and the international policy really interact because by studying how other offices examine their applications, term periods of protection, it makes us really reevaluate our policies. Not just in the design space, but in any other, you know, discipline as well.

Next slide, please. So, this is just to give you a snapshot of what this platform looks like and how we were able to, you know, connect virtually for the ID5 meeting. So, I just waned to share this with you as well.

Next slide, please. So, what was really discussed at this meeting in particular, we talked

about some of the existing projects. We closed the comparative study on design infringement remedies. We also made -- we discussed about progress on some current projects. We also initiated discussion on further areas for potential ID5 recommended practices. This builds on the recommended practices for the DLT design law formalities. I think one thing we -- this group is trying to do is not just have these comparative studies but try to leverage them into developing recommended best practices so that'll take it to the next level. And we also, as I mentioned briefly earlier, we also talked about the importance of new and virtual environments and all of the challenges with protecting designs in those environments.

Next slide, please. So, we also opened five new projects. I wanted to touch upon those briefly. We opened up a project about an enhanced communication plan, how to better engage with our users so they know what we're doing so we can have better ways of exchanging information. We also

talked about exchanging new technology. Perhaps how to integrate new technological tools in examination, in processing, in disseminating some of the information that we have. So, this is another project that is ongoing. We will have a comparative study on deferred publication and examination. I think this was something that was specifically requested by the users so this was adopted at this meeting.

We also have a comparative study on term and renewal of protection. I think this is a really important study and, you know, topical at this time to, again, force us to reevaluate some of the laws and practices on term of protection, on renewing protection. What is best suited for industrial design applicants. And we also decided that this is a good opportunity for us to review all of the existing projects that we had and to see if we can build on that and identify some best practices. We've had projects on grace period, partial design, admissibility of evidence that's on the Internet. So, a whole host of different

projects. We will go back and see if we can leverage some of the information from those projects to come up with recommended best practices.

So, our goals and expectations are that the work, all the work supporting all the projects has been going on throughout the year. The ID5 annual meeting is just really a platform where we get together to update and approve certain projects, but there is a lot of work behind the scenes throughout the entire year. China will be the Secretariat and now will host the next annual meeting. We expect to definitely have a user component to that meeting whether it's virtual or in person. And we want to make sure we do have enhanced community for engagement for the users through the ID5 website, but also as I had mentioned earlier, through other opportunities. Whether we have a Webinar, other vehicles for communicating with us because really it's really important that we hear from the users what's important to them.

So, that is all I have. Obviously, any questions, I'll be glad to take them. And also, Dave Gerk is also on the line and he's our design guru, so I'm sure he'll be happy to answer any questions.

MS. DURKIN: Mary, thank you. We have a minute to spare. That was great. Really excited to hear that there will be some opportunity for user engagement next year in terms of the new projects that are coming down the pike from ID5. I don't know if Dan Ryman is with us or not. If he is, I was going to give him a minute to just give us sort of a look forward in terms of what his -- there you are, Dan. Anything you want to add in terms of what you see for 2021 in terms of what you're doing?

MR. RYMAN: Sure. So, thank you very much, Tracy. I just wanted to quickly introduce myself as well because I am fairly new to my position. So, my name is Dan Ryman. I am currently the Assistant Commissioner overseeing the Office of International Patent Cooperation. I

have been in the position for a little over a month now. And prior to this position, I came from the Office of Patent Quality.

So, a couple of things that I wanted to highlight for the work that we are doing within OIPC. First off, I wanted to actually thank everybody who has been working on the virtual meetings. I know that we've already touched on this, with Tracy's comments and Mary's comments, but I did want to underscore how much work went into moving all of these large international meetings into the virtual format. I mean, there was a lot of work within USPTO and people throughout the world whether that's bringing in from IT trying to find systems that will support translation, et cetera, to move these meetings into a virtual format to project managers who are looking to find times that would be suitable for people from around the world to sign on at a single time.

So, amazing amount of work that went into this. And, you know, credit to all of the

work that happened that we are able to move all of these meeting online and the work has continued, certainly, uninterrupted.

As Mary pointed to, going forward what we're looking to do is to identify a hybrid approach where we will look for what is the best avenue for future meetings whether that be in-person or virtual given the benefits that we have identified due to virtual meeting process. Just wanted to take a moment to highlight that.

The other thing is turning to some of the work sharing stuff. Mary already touched on some of the things that were going on with parallel patent grants. So, we're looking forward to working with them, you know, in this fiscal year to operationalize the agreements that they have been working hard on concluding.

In addition, on a couple of other programs that I believe people are fairly familiar with. Just want to give some highlights. So, first off, the collaborative search and examination pilot. This is a pilot that is being

run through PCT and it involves all the IP5 offices searching an individual case and developing a single search report with the particular application. This project has been going on for two years and the big highlight is they just concluded the operational phase and we have moved into the evaluation phase. And the evaluation phase is going to be about a two-year process as well. So, exciting news that we have shifted phases here and looking forward to relaying the results of the evaluation phase once we get it.

The other big news is on the collaborative search pilot. This is a pilot that we are working with KIPO and JPO and which we both search an application, and again, swap our results. This program was recently extended for another two years. And we are also looking forward to our continuing to evaluate this project going forward. So, that's kind of the big things going forward with respect to OIPC.

MS. DURKIN: Dan, thank you. And my

apologies for not introducing you. I feel like you've been around forever. So, sorry --

MR. RYMAN: No worries.

MS. DURKIN: -- I did not do that. Julie, I know we're over time. So, unless there's questions from the public or anyone else who's on the call here now wants -- has a question, we probably can move on.

MS. MAR-SPINOLA: Yes, we actually have a couple of minutes thanks to our IT subcommittee. So, if there are any questions, we can hear them now. Otherwise, we can move on.

And I don't see anyone's up. All right, so, let's take advantage of the timing. Thank you very much to International Subcommittee, to Tracy. Sound like exciting things are happening. I think maybe you all are experiencing -- that is a disappointment that you didn't get to host in person. So, I think that hopefully there will be a makeup time or opportunity to do that. But, you know, I trust that it was very effective nevertheless doing it virtually. So, thank you

very much.

So, let's move on to PTAB. And this subcommittee is chaired by Jeff Sears. And, Jeff, I want to hand it over to you.

MR. SEARS: Okay, thanks very much, Julie. I thought I would start off our PTAB session today with giving a few highlights on our annual report. So, this year, the PTAB improved the consistency, predictability, and transparency of its proceedings notwithstanding that the pandemic led to the closing of the Patent Office's physical space to the public in mid-March. PTAB was able to make a very swift and complete transition to full telework and remote hearings and that ensured the continued handling of a very steady volume of ex parte appeals and AIA trials.

With respect to ex parte appeals, the PTAB continued to reduce pendency across all technology areas as the Director noted at the start of our session today. And with respect to AIA trials, the PTAB continued to meet all statutory deadlines without extensions.

The PTAB also made significant progress in IT improvements and upgrades. Most significantly, the PTAB is underway to converting from multiple non-integrated IT systems to a single integrated IT system. This conversion will provide many benefits and in particular for external users, it will give them an improved, simple, and single user interface to make filings in all types of proceedings, and it will help reduce administrative filing errors.

At this point, I will turn it over to the PTAB.

MS. BONILLA: Good afternoon. This is Jackie Bonilla. Thanks so much, Jeff, for that introduction. If we can move to our slides, if somebody can put those up. Perfect, thank you. Next slide.

Great, thanks. So, this is just a quick agenda and I know we have a half an hour, which isn't a whole lot of time, but we wanted to go through a few things. Jeff just did a nice introduction highlighting the annual report. So,

we will skip past that one.

We thought with our time we would talk a little bit about one of our precedential cases relating to AIA proceedings, and specifically, the application of the statute U.S.C. 325(d). This is an important topic because it relates to the interplay between PTAB and the rest of the Office.

As you may know, 325(d) states, in determining whether to institute an AIA trial, the director may take into account whether the same or substantially the same prior art arguments previously were presented before the Office, such as during prosecution. Our Lead Judge Deshpande will discuss an Advanced Bionics case, which explains how PTAB applied this statute.

Next, we will talk a little bit about some multiple petitions. Bill Saindon, one of our lead judges, will present one of our latest studies. And this, again, led to multiple petitions. And what we mean by that is more than one petition filed by the same petitioner against the same patent. Whether it be serial over time

or a parallel, meaning they're filing more than one at about the same time.

And lastly, Lead Judge Mike Kim will cover an overview of CBMs. It's an interesting time to talk about CBMs because they just sent that last September. So, some stakeholders have asked for some clarification about, you know, what's going on with them now that we've transitioned Lead Judge Kim will present some information along those lines including some statistics from the past and from today.

So, I think we can move on to the next slide and Lead Judge Deshpande can take it from here.

MR. DESHPANDE: Great, thank you, Jackie. Yeah, we wanted to highlight this case, the Advanced Bionics case. This case has an important interplay between what is happening during prosecution and other things that are happening at the Office, and what happens when the case avails itself to PTAB. Like Jackie mentioned, this is really rooted in the statutory

text of the language of 35 U.S.C. 325(d). The language of that statute asks the question, really, if the same or substantially the same are presented to the Office before. And when we discussed this then in terms of how we're going to manage the application to the statute, the decision sets forth a two-part framework where we asked the question, was this before the Office before? And if it was, we get to the second part of the framework where it says, you can see it on the second bullet point, is whether there has been demonstrated that the office erred in a manner material to the patentability of the challenged claims.

So, when we defer this back to a commitment to previous office determinations, if the office evaluated the same arguments before, a petitioner must demonstrate whether the office erred in a manner material to the patentability of the claims. Under this evaluation, we determined whether to exercise discretion to institute trial or not. Originally the 325(d) statute was

evaluated under a previous precedential case in Beckton, Dickinson. This case reframes it right back into the category of what's really right in the statue. So, it streamlines the analysis to go right back to the analysis as to what's -- what's in the statute.

This is an interesting decision. If you see the decision itself, it does do an in depth characterization of exactly what happened during prosecution and what was before the Office when determining how to apply the statute and whether it exercised discretion or not. So, after applying the framework, the Board will determine whether the petition has the same art or arguments. And if it does, has the petitioner demonstrated an error in material to the patentability of the claims. I think we're ready to move on to the next slide unless there's any questions.

MR. SAINDON: Okay, I can take it from here. Switching on to the topic of multiple petitions. So, what this study was looking at was

from the perspective of a petitioner, how successful are multiple petition strategies? So, in order to look at this, we have the concept of a challenge. So, if the petitioner is going to challenge a patent, that's what we're looking at. Do they challenge a patent with one petition or multiple petitions?

Now, from some of our prior studies that we've published, you know, it's shown that there's generally most petitioners use one petition for one patent. However, in the more rare instance where there are multiple petitions, that's what this study is about. And there's really two types. There's the serial petition, which is one petitioner versus one patent and the petitions are filed sequentially over a course of time. Or there can be parallel petitions where several petitions are filed all at one time.

We'll go into further detail with each of these. If we could go to the next slide.

MR. SEARS: Before you go on, can I ask you a question? This is Jeff Sears. What's the

significance of 90 days?

MR. SAINDON: Right, good question. So, the absolute -- if there's a petition filed, the absolute earliest that a patent owner preliminary response would be due is 90 days from that date. Practically speaking, there's a couple of days of time to process the petition, but the 90 days is the time from filing to (inaudible) in the earliest instance. The significance of that being that anything filed within that 90 days, if the petitioner was to file another petition, they would have learned nothing from either the patent owner or the Board. And so, that's where the 90 days comes from.

MR. SEARS: Great, thanks.

MS. MAR-SPINOLA: This is Julie. If I could just if you could go back to that slide. I just want clarification on I see that the second, third, and fourth petition refer to the same petitioner. On the first bullet, are we talking about multiple petitions by the same petitioner or different petitioners?

MR. SAINDON: Yes, this is a petitioner's, an individual petitioner, what strategy are they taking? Are they filing multiple petitions? So, it's one petitioner against one patent and then how many petitions and how are they filed.

MS. MAR-SPINOLA: Okay, so, in each of these instances, it's the same petitioner, right?

MR. SAINDON: That's correct.

MS. MAR-SPINOLA: Okay, thank you.

MR. SAINDON: Okay, so, let's move to the next slide, please. Okay, so, we need to define a few things here. So, we just defined what a serial petition is where a petition is filed more than 90 days apart from the first one. The second is when from a petitioner's perspective is the serial petition successful or not? So, in all instances of serial petition, you have the first filed petition and then later in time you have the actual serial petition. The serial petition being that second petition.

And so, if the first petition is

instituted and the serial petition is instituted, that's a successful petitioning strategy. That's a successful serial petitioning strategy. If the first petition was denied and then the serial petition was instituted, that's also a successful serial petition strategy. Contrast that with if the first petition is instituted, but the serial petition is denied, well, they didn't get their serial petition, so that was a failed serial petition attempt. And then, obviously, if everything is denied, then it was a failure in both ways.

So, let's go to the next slide, please. So, what we did is using that -- using those definitions, we looked and reviewed the cases from several different fiscal years. And the idea here is that General Plastic was the first precedential case that addressed serial petitions. That was designated right at the beginning of fiscal year '17. So, that provides an interesting natural experiment. We can look at fiscal year '16 where there was no precedential guidance on serial

petitioning, so, we could see kind of what was the state before. General Plastic then sets forth a series of factors for the Board to analyze to determine whether or not to allow a serial petition. And so, we can compare all of that.

Let's go to the next slide. And so, the way that we're going to do the comparison is with a table and these are the columns. So, we have a fiscal year and then we list the number of challenges. And again, a challenge is one petitioner versus one patent. So, we're taking out the volume here whether there was one petition, two petitions, three petitions, we're just looking at what did the petitioner, what strategy did they choose?

So, the next column is serial petition attempts. So, it will have a number of petitioners challenging patents, then how many times did a petitioner choose to do a serial petition strategy? That gives us the serial petition attempt rate. And then we looked at, well, how many times was that serial petition

actually successful? And that gives us a serial petition success rate.

So, let's go to the next slide and see the data. Okay, so fiscal year '16. So, this again, pre General Plastic, before there was any guidance on serial petitions. There was 89 attempts. That's 89 times the petitioner challenged a patent using the serial petition. Out of all the challenges, that's 7 percent attempt rate. So, not particularly high. However, if you look at the serial petition successes, there's 46 of them for a success rate of 50 percent. So, it didn't happen very often, but when it did, it was about a 50/50 shot of whether or not the Board would institute.

Once we have fiscal year '17 and General Plastic is in place, the attempt rate is about the same. And now, we see the success rate has dropped quite a bit. And then we look at today, fiscal year '20, or just fairly recently, the attempt rate has gone way down and there were 7 successful serial petition strategies our last

fiscal year for a success rate of 33 percent. So, one of the things to note here is that General Plastic was introduced in '17, but didn't drive down the attempt rate right away. People were still trying to figure out what does this case mean, plus there was a pipeline of cases that had already been filed before that that we were working through. So, it wasn't until the success rate dropped then the attempt rate dropped.

And so, there were seven successful serial petitioning strategies in fiscal year '20. So, what we did is we looked at the seven of those and we tried to determine what is it that that's about that case that made it so that the serial petition was allowed? So, let's go to the next slide and look at those seven.

Okay. So, in two of the instances of the seven, what happened was the patent owner asserted new claims in the district court. We were still within the 315(b) time bar window, so, the petitioner filed its -- filed another petition to address these new claims. So, using the

General Plastic analysis, which is kind of a balancing of the equities, the panel decided that, well, this is an okay situation and they allowed that petition to be looked at.

There were two more where the patent owner didn't contest adding just one or two claims. In one of them, it was pretty clear that an error was made. The petitioner omitted a claim. So, you know, the petitioner filed maybe a first petition with a large number of claims and then later filed another petition, again within the time bar window, to add one or two claims that they had omitted. And the patent owner was -- did not contest them.

And then, lastly, there was three of the seven where there a CBM filed. The CBM was denied on the basis of it not being eligible for a CBM. So, the petitioner immediately after getting that decision, filed an IPR using a ground that's not eligible in CBMs, 102 ER is not eligible for CBMs. So, the filed a ground that they could have raised in the CBM in the IPR. And because the CBM was

denied not based on the merits, but just based on the eligibility, the panel determined balancing the equities that it was okay to refute those three IPRs. And again, with CBMs, subsetting out this reason probably won't happen again the future.

So, let's go to the next slide. So, to sound off before turning to the parallel petitions, the success rate of serial petitions dropped dramatically immediately after General Plastic was issued and made precedential. The attempt rate dropped, but it took some time, and it was after the success rate dropped then the attempt rate subsequently dropped. And in general, serial petitions were successful when the scope of the district court litigation was in flux or to correct minor errors and omissions.

Okay, let's turn to parallel petitions now. Okay, once again, we have to define what is a successful or unsuccessful parallel petition? So, serial petitions was somewhat easier in that you have this passage of time. You have the first

one and then the second one. Parallels are flat filed generally on the same day or within a day. And so, right here we're going through the different permutations. So, the key here is that the parallel petition, the truly parallel petition is that second petition that's instituted. Okay, so, in the top left corner, we have three institutions. So, they had a first institution and had two additional ones that's clearly successful parallel petitioning. If they had a first institution and a second institution, that's also a success. They were able to get their parallel petitions instituted.

Now, if just one petition is instituted, that's a parallel petitioning failure. They were able to get a petition, but they were not able to get a parallel petition. And then, obviously, the easy case, if they're all denied then that's clearly a failure. One note here. The order doesn't matter, parallel petitions are filed at the same time, so which one's the first or second is somewhat arbitrary. So, you can imagine these

can be in any order, but I've presented it this way just to simplify things.

Okay, let's go to the next slide. The timeframes for parallel petitions. So, in mid-fiscal year '19, the Board issued a case called Comcast v. Rovi. And it was actually an order. In that case, the petitioner filed a number of parallel petitions. I don't recall the exact number, but it was quite a few. And the Board issued an order basically saying, look, you need to pick one. Tell us what's the best one that you want us to evaluate and we'll evaluate that one. And if there's some extraordinary reason we need to look at these other ones, you can tell us that too.

And that kind of set -- that was the first time the Board did that. The Trial Practice Guide update, which was later that fiscal year, baked that into our practice. So, now, when a petitioner files multiple petitions at the same time, a parallel petition, they have to tell us which one they want us to review. So, basically,

the rule is pick one and if you have a really good reason for us to look at these other ones, tell us that really good reason. Again, it's kind of a balancing of the equities here.

So, the fiscal years we'll look at here are fiscal year '18, which is before any of this happened. Fiscal year '19 where we were transitioning into analyzing parallel petitions with this pick one policy, and then fiscal year '20, which is the latest information we have.

Let's go to the data. Next slide, please. Okay. In fiscal year '18, we saw an attempt rate for parallel petitions about 15 percent. So, that means, 15 percent of petitioners tried to file multiple petitions at around the same time to challenge a given patent. They are successful about half of the time. So, that doesn't mean they necessarily got all of their petitions, but they got at least that second petition about half the time.

Fiscal year '19, which is where we started transitioning and having guidance on this

topic, the attempt rate notched up a little bit to 20 percent and the success rate also notched up a little bit to 54 percent. Fiscal year '20 now, however, that's when the Board was operating on petitions filed under this particular scheme of pick one. The attempt rate still stayed about the same, 15 percent, but you notice now the success rate has dramatically dropped down to 30 percent, not quite half of where it was last year. So, again, we looked at these 43 successful parallel petition instances to figure out, okay, what was going on that the Board panel decided that it was okay to -- and actually, before I jump there, I just want to note there's a footnote down there. It says that the average number of petitions filed in a -- it should say parallel petition attempt -- was 2.2 in fiscal year '18, 2.37 in '19, and 2.28 in fiscal year '20. What this is telling you is that when a petitioner did try a parallel petition strategy, the average number of petitions filed in total was 2.something. You know, as compared to 5 or 10 or 20. It was usually just two, one extra

petition.

So, let's go to the next slide here where we look at those 48 successful parallel petition situations. Okay, so, the first one listed here for 11 instances where there was a large number of claims for this complex claim set. Basically, we're talking about a large number of things to talk about in which the Board's fairly restrictive page limits were not enough to address the situation. So, there was a large number of claims. One petition would, you know, maybe the first 20 or 30 claims, the next petition would have the next 20 or 30 claims, and they were broken up that way. So, these were, you know, effectively but for the page limits, they would have all been together.

So, non-overlapping claims after the first group. The second group is cases where there was an issue of prior art eligibility or antedation. So, say the best prior art was a 102(e) getting close to the challenged patent's priority date. They weren't sure whether the

patent owner would try to antedate it or not. Usually in the briefing, we would get an affirmative yes, we are going to challenge it or no we're not going to try that. So, what happened here was usually that issue was still fresh. It was going to be disputed. So, the panel determined balancing the equity there that it was okay to have another petition, you know, in addition to this petition with this prior art eligibility or antedation issue. That was 12 cases.

There were 20 in which the patent owner just didn't contest the issue. They often contested other things. Maybe they raised a (inaudible) issue or a 325(b) issue or just merits issues, but they didn't challenge the parallel petition issue. And looking at those, they were all issues where there was a large number of claims. The petitioner was saying there was large number of claims here, that's why I've done this. So, they probably just didn't contest it for that reason or they just didn't feel like it was worth

their pages.

And lastly, there was one where patent owner asserted new claims in the district court and it just happened to fall within that 90-day the difference between parallel and serial petition window so the petitioner was able to just quickly submit a new petition addressing the new claims and go from there. So, you'll notice if you add these up, it adds up to one more than what I had before. That's because there was one case that had two of these issues going on in it.

Okay, so that was the successful parallel petitions last year. Observations. The attempt rate has slightly fallen from last year, but not, you know, orders of magnitude. The success rate, however, has fallen quite a bit. Given the way that we saw the serial petitions work out, it took a year before the attempt rate really dropped. I wouldn't be surprised if next year the attempt rate for parallel petitions drops based on that. Historically, again, we don't quite know.

But if you look to the merits of what's going on in these cases, two-thirds of the time it's the parallel petition was filed to cover a non-overlapping claim set on the same art. Basically, we're talking about it's just a big patent or the issues are very complex and they need more pages. One- third of the time was to cover those uncertain prior art status issues. Either there was an antedation issue that was live or some sort of prior eligibility issue that was live, and that covered that situation. And, again, if a parallel petition is granted, 90 percent of the time when the Board grants a parallel petition, it results in two total trials against that patent for that petitioner.

Okay, I'll move to the next slide. I believe that is it, yes. So, if there is any questions? If not, thank you very much for listening.

MR. SEARS: This is Jeff Sears. I'll just make a comment. I really appreciate your analysis why certain serial or parallel petitions

were successful. The actual walkthrough of what the factors were really helpful, and potentially some strategic advice for patent owners who are in litigation or petitioners. Really helpful, thank you.

MR. SAINDON: Thank you.

MS. BONILLA: I think that next we'll have Lead Judge Mike Kim talk a little bit about CBMs. Mike, are you able to get on?

MR. KIM: Yes, I'm here. Thank you, Jackie.

MS. BONILLA: Excellent.

MR. KIM: Yes, so, on September 16, 2020, the Covered Business Method Patent Review Program sunsetted after eight years. Although the second bullet point, we will note that that doesn't mean that there are no more CBM proceedings. Although the program has sunset, petitions filed on or before September 16th are still pending at the Board. And there are some numbers there, but we have some graphs which we think probably do more justice. So, if you go to

the next slide, please.

So, as far as the overall volume of the CBM program, you can sort of see that it started off with 8, peaked at 177 in fiscal year 2014, and then sort of had a slow decline until we had 22 in fiscal year '19, and 20 in fiscal year '20. Although, I think there's probably a little asterisk deserved for fiscal year '20.

So, if you go to the next slide, please. So, the big takeaway here is on the top graph at the far right, you will see that eight were filed right at the sunset of the program. So, you can sort of decide for yourself, you know, how to handle that 8 of the 20 that were filed in fiscal year '20. So, with that, we just wanted to provide a quick update. And if there are any questions, I'm happy to try to answer them.

MS. BONILLA: And I just wanted to follow-up. That was the bulk of what we had to discuss for today, unless anybody has questions. But we did want to thank you, Jeff, for all of your support and also for the entire PTAB

Subcommittee as well as Julie and the entire group at PPAC. Your support of us and feedback that you've provided to us has been really, really valuable. As you know, we've gone through a lot of changes in the last couple years. This has been a big attempt on our part to do a lot of things at once. Lowering our pendency and ex parte appeals, improving our processes in AIA trials, to try and be fair and balanced and transparent to our stakeholders. And feedback that we get from stakeholders and particularly from PPAC are very, very helpful to us. So, thank you so much for all of that and for staying in touch with us and providing all the great feedback that you do.

MR. SEARS: Thank you very much for the kind words. It's been a pleasure to work with you and the rest of the PTAB this year. And I think you've made some great progress and we look forward to continuing a great working relationship. Thank you.

MS. CAMACHO: Jeff, we do have a couple

of minutes and we did get a question in from the public asking whether they can get the raw data for serial and parallel petition study?

MS. BONILLA: Yeah, that's something we can look into. We can see if we can provide that. We've done that in some of our other studies where we just gave the raw numbers. We did that on a motion to amend. So, we will -- motion to amend study -- so, we'll look into whether we can do that here as well.

MS. CAMACHO: Thank you very much.

MS. MAR-SPINOLA: Okay, Scott, you've been quiet. I miss hearing from you. So, do you have anything to add or to laud your team?

MR. BOALICK: No, I have nothing to add. Just to, you know, echo the same things that Jackie did. I really appreciate all the support and assistance from PPAC. I look forward, you know, to interacting another year. Was just, you know, giving some other team members some airtime this time.

MS. MAR-SPINOLA: No, I think that's

great. And by the way, I wasn't looking for compliments to the PPAC. I was looking for you to compliment your team who we think are great and amazing, so.

MR. BOALICK: Right, well, and, you know, likewise, you know, it really does take a team and I think we've got a fabulous team here at PTAB. It's a pleasure working with everybody and, you know, they're all super dedicated to their job. So, it really just does make it a pleasure, you know, going to work every day.

MS. MAR-SPINOLA: All right. Okay. So, unless we have further questions, I think we're going to stay on time and move to the Legislative Subcommittee. Today we have Kimberley Alton, our Deputy Director, Office of Government Affairs and Oversight, who will be giving us an overview on the status of legislative matters. I think I'm going to turn it a little bit different than what we've been doing, which is to have a preview of the annual report, but I think I'm going to hold back and do recommendations after Kimberley's

presentation.

I did want to say and take this time, given that I have an extra minute or two, is to say all the presentations that you've seen, I believe, will be available on the PPAC webpage. And then also, importantly, the annual report will be available. It gets released Tuesday, the 24th after 6:00 a.m. eastern, and it will be published in the EOG. But you can also find a pdf copy of the report with live links also on the PPAC webpage. And we can -- so that's important to know.

And the reason why I emphasize that is one, the annual report really does, particularly this year for 2020, is that we really wanted to dig deep into all the issues and also to prime it for 2021. The important feature, I think, that we have in this year's report also is that we provide live links to the key documents that we refer to here today and also in the report. Once you open that report, I think it makes it easy for you to see the supporting documents or studies or any of

the additional reports that we refer to there.

So, with that, I'm going to ask Kimberley to take over.

MS. ALTON: Great, thank you. Can everyone hear me okay?

MS. MAR-SPINOLA: Perfectly.

MS. ALTON: Okay, great. Well, good afternoon, everyone. The government affairs team has been very busy this year. So, we'll certainly talk about that as part of the presentation. And also share with you all some of the things that we are hoping to accomplish during this lame duck session before Congress adjourns and the 116th Congress comes to an end.

So, if we could go to the next slide, please. So, at the top of the list is the telework for U.S. Innovation Act. So, I'm just going to go through a couple of bills that we really are pushing and have our fingers crossed that we will be able to get them across the finish line this year. The first, as I mentioned, is the TEAPP, the Telework for U.S. Innovation Act.

This is the popular telework program that we have at the PTO. We have about 3,000 employees who are a part of this program. It is set to expire. It's a pilot that will expire on December 31st. We're feeling pretty good. I don't want to jinx anything, but we have a couple of paths to try to get this across the finish line. And the bill does have bipartisan and bicameral support, which is huge to have both parties and both houses of Congress come together in support of this successful telework program at the PTO.

And then the next bullet, Patents for Humanity Improvement Act. That is a bill that's been passed by the House by voice vote, and we are also optimistic that it will pass in the Senate. This is the bill you all might remember it's linked to our very popular Patents for Humanity Program where the winners of that program are given acceleration certificates that allow them to have their patent application expedited. This bill would allow those certificates to be transferrable. So, we hope that we will see some

movement on that.

And then, of course, our funding. And the government affairs team works very closely with our colleagues in the Chief Financial Officer's office on watching our appropriations. Right now, we are operating under a continuing resolution that expires on December 11th. So, we are watching that. Congress has about three weeks to sort of hammer through a omnibus bill that will keep the government running. So, we will be monitoring that closely.

Next slide, please. Sovereign Immunity Study. And I believe my colleagues in OPIA might have mentioned this study that we have been asked to do by Senator Thom Tillis and by Senator Patrick Leahy. They sent a letter asking that we pull together a report that really looks at the extent in which patent or trademark owners are experiencing infringement by states or state entities. There was a request for information that went out and was published in the Federal Register earlier this month. And we wanted to

make that link available and certainly welcome public comments. If you click on that link, you will be able to submit your public comments on this issue. The deadline to submit comments is December 21, 2020. We will certainly use those comments and the OPIA team will use those to produce a report that we will submit to Congress next year.

Next slide. Also, we want to share that Senator Thom Tillis, certainly a friend of the Office has been very active. He's the Chairman of the Senate Judiciary IP Subcommittee. He sent letters to Director Iancu back in August and September and he is really asking the Office to consider certain reforms to some of our patent processes. It's based on studies that came from two university professors on things that we could do and consider. I know that our Patents Office has looked at that letter. I think conversations have started to think about some of these suggestions, these suggested reforms that we might make.

You'll see the first bullet it's a request that we really look at how to clearly distinguish hypothetical examples that are given in patent applications versus what's real. And so, they really think that there should be more clarity there. And then the second is really related to disclosure of patent ownership. Really asking that we do more. I know in one of the letters the Senator suggested that perhaps we provide incentives for applicants and owners to give us more information on true ownership and licensing and transfer so that there's more transparency there and there's more standardization there.

So, again, those are two requests that we got from Senator Tillis. We've responded to him to let him know that we appreciate those requests and certainly want to work to make improvements, and that we are looking into these different reform ideas.

Next slide, please. The U.S. IP Enforcement Coordinator earlier this month issued

his Joint Strategic Plan. And so, you all will recall the IPEC. He is a officer within the White House who is really responsible for coordinating IP enforcement among all of the different federal agencies. And so, this Joint Strategic Plan that was released last month is really a compilation of all of the work related to enforcement that's going on within all of the different agencies. So, it includes Commerce, Justice, Department of Homeland Security, and even the Copyright Office, and really just pulling together in one document sort of what the strategy is as it relates to enforcing and protecting IP. So, that report did get some press earlier this month. So, we just wanted to flag that for you all. Our enforcement colleagues within OPIA do a lot of coordination. There are a lot of interagency meetings that are held by IPEC. And so, we certainly cooperate and collaborate with our colleagues in that office.

Next slide. So, we wanted to just really provide a recap of some of the success stories that we feel that we have to share within

the Government Affairs Office in terms of the work that we have done over these past two years within the 116th Congress. So, of course, the CARES Act. That was huge. There was a lot of time spent really working with Congressional offices on giving the Director the authority to extend deadlines, to waive fees. And so, that was huge and something that we really worked hard on and I think it worked well for our stakeholders.

And then, of course, you all are most familiar with the work related to the collected fees from several years ago that continue to remain in our treasury account. We've had a lot of good conversations with Hill offices. They're aware of it and we think that that is progress. We'll continue to certainly push on that issue to ultimately have access to those fees at some point. And then, as I mentioned earlier, TEAPP, the telework, so important to the Agency, especially during this time when we are operating under maximum telework for everyone at the Agency.

Next slide. And again, continued

successes. Patents for Humanity. And then last is really drug pricing. We spent really a lot of time last year before COVID, there was a huge debate in Congress about drug pricing. Lots of bills, lots of debate, and markups, and committees in the House and Senate. And so, we did a lot of education with Congressional offices with the staff to really emphasize the importance of IP, what it means, how it relates to advances that we see in pharmaceuticals. And really tried to make the case to preserve and protect strong IP rights. There were bills out there that would have really, in our view, undermined IP protection. And so, we think that it was certainly a success on our part to be able to work with our subject matter experts at the PTO to have them come in and really talk and have good conversations and briefings with Congressional offices so there's a broader understanding of kind of what's at stake as it relates to drug pricing and patent rights.

Next slide. So, looking ahead to next year and the 117th Congress. Certainly, Section

101 reform we know that that will continue to be an issue. Senator Tillis is certainly focused on that and we will work to be responsive and support those efforts and monitor those efforts. Arthex, we know that all eyes are on the Supreme Court now, and we will see how -- what the Court decides. And there have been hearings on this issue, but I think everyone's sort of waiting to see what happens with the Court decision and whether or not there is some legislation that would be necessary. So, we will certainly be watching that.

And then drug pricing. As I mentioned, we know that that will continue to be a issue and so, there's so much turnover on Capitol Hill that we often spend a lot of time reaching out to new offices, when you have new members of Congress, they have new staff. So, I really think that we will spend a lot of time doing a lot more education as it relates to drug pricing and IP.

Next slide. Well, that's it. Thank you so much. And, please, let me know if you have any

questions. I know Branden is on the line and we're happy to answer any questions.

MS. MAR-SPINOLA: Thanks, Kimberley. That was great, a great summary. Branden, do you have anything to add?

MR. RITCHIE: No, I think Kim did an excellent job. I'll just say that Kim is officially our Deputy Director at OGA. She just got that role and we're very excited because of her experience and expertise.

MS. MAR-SPINOLA: Congratulations --

MS. ALTON: Thank you.

MS. MAR-SPINOLA: -- Kimberley.

MS. ALTON: Thank you. Thank you.

MS. MAR-SPINOLA: Well deserved. Well deserved. So, then with that and I don't see any questions right now. Jennifer Camacho, do you have any questions?

MS. CAMACHO: No, no questions from the public either.

MS. MAR-SPINOLA: Okay, thank you. So, let me finish the legislative side by making

PPAC's recommendations for 2020. Again, I urge everybody to take a look at the annual report because we have a lot more details in there. And I think you'll find it very interesting and important in terms of answering some of your questions.

So, in terms of recommendations, the PPAC recommends that the USPTO continue to engage decision makers and other stakeholders to help ensure that proposed legislative or administrative changes are appropriately crafted and narrowly targeted without adversely affecting the overall patent system. To that end, the PPAC recommends the PTO consider the affect of such changes in terms of balance and fairness to all stakeholders, the efficient operation of the examination process, the quality of patents issued, and the overall costs and burdens to the patent owners and other participants in the patent system, particularly in post-grant proceedings.

The PPAC also recommends that the USPTO stay abreast of potential suggested legislative

changes regarding patent subject matter eligibility under Section 101. The conduct of PTAB post-grant proceedings and review proceedings and legislation related to addressing the COVID-19 pandemic to the extent it affects the patent system.

Further, the PPAC continues to support raising the current mid-level rank of USPTO IP attaches by one level. That is from first secretary to that of counselor, which would give the USPTO IP attaches parroting and great access to senior post-government officials to the ambassadors at the respective embassies and to senior industry representatives and support consideration of other reasonable changes to allow the IP attaches to more effectively accomplish their mission.

We also at the PPAC supports the USPTO's ability to access funds previously collected from the USPTO users and credited to the USPTO's treasury account. The PPAC urges Congress to release those funds for the USPTO's sole use to

modernize its computer infrastructure and security systems to allow examiners more time to consider cited prior art to ensure higher quality patents that are issued and that are durable and to implement programs that ensure diversity in its workforce and among the inventor community.

Lastly, the PPAC supports permanently authorizing the TEAPP, TEAPP telework program so that the USPTO can continue to reap the benefits. I think that was TEAPP wasn't it? In any event, so, that the USPTO can continue to reap the benefit this program brings including the approximately $100 million in cost-avoidance including in real estate costs, reduced office space usage, as well as recruitment and retention benefits associated with the program.

So, those are the PPAC's recommendations on the legislative side. I think they're aligned, for the most part if not completely, with what the PTO's efforts have been but we want to, to the extent that we can add our voices to that, there you go. So, with that, if there aren't any

questions, then we're going to go to our last, but never least, subcommittee discussion on finance and budget. And I'm going to turn it over to Dan Lang who has taken for the last six years of his term quite a bit of the heavy lifting on the finance side. So, let me turn it over to Dan.

MR. LANG: Thank you for that introduction, Julie. But, I mean, the real heavy lifting is done by the OCFO, you know, led by Jay Hoffman, but also, you know, lots of people. Some of whom, you know, appear at these meetings, but also lots who are working behind the scenes on the very important work of keeping the PTO's finances in order.

And I'll start with, you know, a bit of a summary of the annual report and then I'm going to hand it over to Brendan Hourigan. Jay Hoffman had an emergency that came up and can't join us right now. But, you know, looking at the annual report, which I urge everybody to take a look at because there's a lot of detail in there about the Agency's finances. And if you care about the

Agency's objectives of reliable and certain patents and reducing pendency and providing quality, then you should care about the financial underpinnings of that. And what you'll see there if you go read it is that the key event of the year like in so many other arenas, was the pandemic. The pandemic caused an economic downturn and the economic downturn that creates uncertainty about patent fees and the Office has done a great job of managing that uncertainty.

I mean, over the course of the year, fee collections stayed pretty close to plan. You know, they were falling below plan, but then we got a surge of prepayments because there was a fee increase on October 2nd. And that's a very, you know, very important inflection point also that we mention in the annual report, there was a fee review that had been going on for several years that finally culminated in a fee increase. I mean, the PTO made adjustments to its spending plans and then it made additional contingency plans that they prepared but they didn't put into

effect. They've been watching things very carefully preparing for a range of outcomes.

The operating reserve group, we had a good year in terms of not having any lapses in appropriation authority, which has happened in other years. And although we culminated one fee review process from several years ago in the fee increase that happened October 2nd, the other fee review process has been in plight and that resulted in a new proposal for a fee increase. There was the President's budget released for FY21 and also this is the fiscal year that Jay Hoffman took over as the chief financial officer.

So, our recommendations were, you know, continue managing things carefully, maintaining that stable funding is important. We reiterated what Julie just mentioned about releasing previously allocated -- or rather previously collected user funds that are in the treasury account that can only be used for the PTO as I understand it. So, they should be released so that the PTO can have more resources to pursue

quality timely examination, invest in modernizing its infrastructure and, you know, maintain stability in case there are future, you know, reductions in collections or interruptions in appropriation authority.

You know, we, you know, recommend the, you know, the PTO increase its operating reserve. We, you know, recommend like we have in previous years that if there were to be an appropriation lapse in the future, the USPTO should be able to spend the money that it collects from users during such a lapse. And, you know, we were lucky that there wasn't such a lapse this year, but it could occur in the future. And those monies can't be used for anything else by loss. We would prefer that they be made available to the PTO.

And on the topic of fee increases, you know, we recommended some degree of caution. The economy is still in a very fragile state. You know, many individuals and organizations don't have the funds that they usually would have to, you know, to pay higher fees. And on the other

hand, it's really important that the fees continue to stay in line so that the Office, you know, has the money to provide high quality service. We just say that the timing and magnitude of any new fee adjustment should reflect, you know, what economic conditions are and, you know, how it might impact user participation in the patent system. So, with that I will turn it over to Brendan.

MR. HOURIGAN: Thank you, Dan. Are you able to hear me okay?

MR. LANG: Yes, we hear you.

MR. HOURIGAN: Okay, great, thank you. Okay, as Dan mentioned, I'm Brendan Hourigan, the Director of Planning and Budget and I'm sitting in today for Jay Hoffman who had a conflict he couldn't avoid. So, this first slide this covers the items that we'll be talking about at this meeting and I'll be covering. We can go to the next slide, please.

Okay, in looking at fiscal year 2020, as we review it we start from when we first submitted

a plan in the FY 2020 President's budget with a revenue expectation of 3.095 billion against an expense expectation of 3.172 billion. The plan assumed a fee rule implementation on January 1, 2021. Our expenses at that time assumed we would fund more than 600 patent examiners did not include the cost of impacts for the FY 2020 for the pay raise that came from 2019. So, then we fast forward to the beginning of FY 2020 and you'll see in the table that we started FY 2020 with a plan for revenue expectation of 3.4 billion against expenses of 3.256 billion. The plan assumed a fee rule implementation of July 10, 2020. Our expenses at that time assumed we would onboard 750 examiners.

In March and April, PTO made adjustments to the spend plan to hedge against the pandemic driven economic downturn and subsequent revenue collection volatility. Most of these reductions targeted the trademark business line since we were seeing volatility in fee collections at that time. Reductions that impacted the patent business line

included part of the hiring freeze and deferral of patent examiner hires. We also prepared contingency reductions in case we saw a significant downturn on the patent side.

The Agency made a strategic decision to delay the implementation of the fee rule from July to October. As a result, you will see in the second level of the table actual revenue was 3.3 billion, about 75 million below plan, and expenses were 3.1 billion, approximately 105 million below plan. These decisions, as well as accelerated payments and renewal fees in advance of the fee increase, resulted in the Agency maintaining its operating reserves comfortably above minimum levels putting the patent business line in a strong financial position to start fiscal year 2021. Given the continued economic uncertainty of the current environment and potential for additional revenue volatility in the next 12 to 18 months, we think this conservative approach that includes a stronger operating position, this operating reserve position is appropriate.

Go to the next slide, please. Looking at this chart, the blue bar is the FY 2020 authorized collection level. The green bar shows the actual revenue collections. This chart is in millions of dollars. Total collections for the USPTO were just under 3.7 billion. This is about 232 million above the Agency's spending authority level appropriated by Congress. It was 3.45 billion. When revenue collections exceed spending authority, any funds collected in excess of the authority are deposited into a separate treasury account, which is called the Patent and Trademark Fee Reserve Fund, better known as the PTFRF.

The PTFRF is not an operating reserve or savings account and should not be confused with the normal operating reserve. Most of these additional collections, about 215 million, were the result of the patent fee increase that went into effect on October 2nd. The patent holder in some instances, chose to pay their maintenance fees early at the lower rate and those payments happened prior to October 1st. Thus, a temporary

spike in patent revenues occurred.

For patents, our spending authority was allocated at about 3.1 billion. In order to spend these revenues in the Patent and Trademark Fee Reserve Fund, they must be removed -- moved over from that account to our regular USPTO salary and expense account. This action requires Congressional notification and approval and we have initiated that process. We're expecting approval later this quarter, which is quarter one.

Next slide, please. For this chart, the blue bars are the fiscal year's ending balance of the operating reserve for fiscal years '17 through '20. The Y axis is the reserve balance in millions of dollars. The red dashed line shows the minimum operating reserve currently at 300 million, which is about one month of expenses. And the green dashed line shows the optimal operating reserve. It's about 780 million for fiscal year 2020. The patent operating reserve ended at 395 million for fiscal year 2020. This is a $12 million increase from the prior year and

it's comfortably above the minimum operating level.

As I said in the prior slides, this operating reserve level puts the patent business line in a reasonably strong financial position heading into the next fiscal year, despite lingering risk of economic uncertainty and revenue volatility over the next 12 to 18 months.

Next slide, please. This chart is showing us the patent revenue rates for fiscal year 2020. The X axis is in months in fiscal year '20 and the Y axis is revenue in millions. This is the rate that we receive revenue. Think of it as a speedometer. Revenue rates have stayed between 3.0 billion to 3.1 billion for the year. This chart does not show any intermonth volatility. For the last two months of the year, revenues accelerated due to the accelerated payment of renewal fees.

Next slide. This chart looks at application revenue throughout fiscal year 2020. The X axis is in months and the Y axis is

percentage above or below plan. The plan is noted by the zero line, which you see going horizontally across the lower third of the chart. The blue line is the 20-day moving average showing the percent difference between revenues collected and the planned amount. The orange line shows the aggregate year end trend for revenue above or below the plan. From this chart, you can see we dropped below plan for the last nine months of the year with three negative drops in patent revenue. One occurred in January, February timeframe. Another occurred April through June timeframe. And then another in August. Revenue declined as much as 15 percent below plan.

Next slide, please. This chart looks at the patent renewal fees through fiscal year 2020. The X axis is in months and the Y axis is the percentage above or below the plan. The blue line is the 20-day moving average showing the percent difference between renewal fees collected and the planned amount. The orange line shows the 40-day moving average. There is a spike in the moving

average values at the end of September due to the patent maintenance fees accelerated payments, in anticipation of the October 2nd fee rule effective date.

Next slide, please. This slide is looking at our accelerated payments. With October 2nd as the effective date for our fee increase, we initially estimated that we would receive 445 million in early collections. We ended up collecting on about 65 percent of this amount, a total of 291 million. Of that 291, 266 was received in fiscal year '20, while the rest was received on October 1st in fiscal year 2021. We expect that whatever fees we didn't receive as accelerated payments, we will receive in fiscal year 2021 at the higher fee rate.

Next slide, please. Moving on to fiscal year '21, the USPTO has submitted a budget proposal to Congress, which was done last February asking for 3.7 billion in authority, of which 3.2 billion was for patents. Congress has not enacted a budget for fiscal year '21, and instead, has

enacted a temporary continuing resolution, or CR, as it's called. The CR is just a formula that uses the spending level enacted from the prior year, in this case 2020, and multiplies it by the percentage of the year covered by the CR. For this year, the CR goes through December 11th, which is 19.7 percent of the fiscal year. To calculate the spending authority under the CR, a PTO multiplies the 3.45 billion from last year's budget by the 19.7, which results in the 681 million. We add that to the 532 million from the operating reserve, it gets us a total of 1.2 billion. Using last year's patent allocation, that results in a billion in spending authority for patents. This does not include the 215 million that's in the patent and trademark fee reserve fund that belongs to the patent side.

When Congress approves that funding for transfer to our main account, that money will also be available. Until the Congress enacts a full year appropriation and spending authority level, the Agency will defer some of our spending

requirements until later in the year and incrementally fund contracts in some cases to conserve available funding.

Next slide, please. Excuse me. The current fiscal year 2021 revenue fee collections estimate is 2.86 billion. This forecast was developed during the summer and assumed we would receive 445 million in accelerated payments in fiscal year 2020. We now know that we received only 266 million of those accelerated payments. So, the remaining 154 million plus the increased costs due to the fee rule, is what we expect to see in '21. Consequently, as a part of our normal process, we are updating our fiscal year '21 forecast prior to submitting the Congressional budget in February. The revised forecast expects higher revenues in fiscal year '21 and we'll discuss that information in our next meeting when the forecast and budget changes have been completed.

Next slide, please. So, as far as staffing, the current fiscal year '21 hiring plan

includes 500 examiners, which is a net increase of around 118 examiners. The 355 additional staff includes non-examination staff, as well as other production related positions.

Next slide, please. So, for the FY22 President's budget, we have a request that should be submitted to Congress on or about February 8, 2021. The USPTO expects that appropriation hearings will be held for DOC's FY 2022 budget by the House and Senate Commerce, Science subcommittees.

Next slide, please. And now a little bit on the fee rulemaking. The new patent fee rates took effect October 2, 2020, as I mentioned. The Agency is still currently conducting a biennial fee review. The review incorporates recent assessments of fees to ensure that they will generate sufficient multi-year revenue to recover the aggregate cost of maintaining patent related operations and support accomplishing the USPTO's patent related strategic goals.

And that's it for my presentation.

Thank you.

MR. LANG: Thank you, Brendan. Are there any questions?

MS. MAR-SPINOLA: This is Julie. I think that we're going to have robust discussions at the beginning of the year about these numbers, right, and what else we can do. There is a lot to contemplate and my guess is is that with the ongoing -- or the resurgence of COVID, that there may be other impacts. So, thank you, Brendan, for that information. It's very helpful.

MR. HOURIGAN: Thank you.

MR. CALTRIDER: Brendan, I have a question. This is Steve Caltrider. If you can go back, I think it was your Slide 129, the patent trademark fee reserve fund. I think I understand the difference between that and the operating reserve fund. But if you can walk me through again the differences in those two accounts, that would be helpful.

MR. HOURIGAN: Sure. And think of it a little bit as internal versus external. So, the

operating reserve, the PTO operating reserve is internal. So, it's part of our normal checkbook let's say or our balance sheet. We have revenue and expenses and whatever's left over is our operating reserve, in simple terms.

However, when we collect -- so, if we are appropriated a certain dollar amount and we collect above that, then it goes outside of our checkbook. It goes into this Patent and Trademark Fee Reserve Fund. So, let's say $4 billion is appropriated to collect and we collect 402 billion, that extra 200 goes into the Patent and Trademark Fee Reserve Fund. The 4 billion that's in our -- that is our level, then anything that we collect up to the 4 billion, anything we spend, the remaining balance is our internal operating reserve level. But anything we collect above the 4 billion goes into the PTFRF, which is outside of our account. And then when we do the reprogramming request and get that approved by the Hill, then those monies are transferred in and then our balance, if it was all happening at the

same time, would be the 4 billion two. Does that make sense?

MR. CALTRIDER: That does make sense. Can you perhaps ground me in terms of the relationship of the PTFR fund with the essentially close to billion dollars that Congress is -- that we've collected and not yet been appropriated, was that just under the law at the time so it doesn't exist in this account? Or is that -- what's the relationship with that money and this money?

MR. HOURIGAN: So, that's correct. That was collected before the Patent and Trademark Fee Reserve Fund account was ever established. So, that's sitting in a different treasury account all together. So, that's prior to the legislation that created the PTFRF. So, anything after that legislation established that PTFRF fund now goes into the PTFRF, but anything that was collected prior to that went into a treasury, a separate treasury account that we don't have access to immediately.

MR. CALTRIDER: All right, thank you.

MR. LANG: All right, well, sounds like there are no further questions. I mean, I'll just add in, you know, my thanks for the six years working with the OCFO along with, you know, the rest of the leadership of the Patent Office and, you know, it's been a great pleasure to serve. I've learned a tremendous amount and hope I'll be in touch with the people I met at the Patent Office and my PPAC colleagues in the future.

MS. MAR-SPINOLA: Thank you, Dan. Thank you, Brendan. We appreciate everything that you've reported on and, Dan, of course, you know, no one could help the PPAC run the finance part of the subcommittee than you. So, you're going to leave a huge gap for us, but I think that this closes our subcommittee's discussion. A couple of closing -- I think we're going to finish early unless there's anything more. Let me just double check and see.

Okay, so, let me just two comments. Our next PPAC meeting will be is scheduled for February 11, 2021. The other dates are going to

be listed, again, on PPAC's webpage, and which you'll find at the PTO's website. And then a personal note to my PPAC friends, Steve, Dan, and Mark, is that we thank you for your service. I thank you for your service. I thank you for your leadership and your leadership will be missed. But we trust that you will continue to make meaningful contributions to the patent system. But really, most importantly, the three of you will be missed. And so, that's basically what I want to say to you all. Although, look for my invitation later because we usually have our dinner when we're at the quarterly meetings. So, we'll have to make up for that.

And then to everybody else to all, take care, be safe. Have a happy Thanksgiving and stay healthy. Enjoy your family virtually or however safe distance. So, I'm going to ask for a motion to adjourn in a second.

MR. LANG: I move.

MS. MAR-SPINOLA: Okay, thank you, Dan. Do I have a second?

MS. CAMACHO: Second.

MS. MAR-SPINOLA: Thanks, Jennifer. I was thinking well, maybe we don't want to end this meeting. But thank you everybody and we'll see you soon.

(Whereupon, at 3:50 p.m., the PROCEEDINGS were adjourned.)

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CERTIFICATE OF NOTARY PUBLIC

COMMONWEALTH OF VIRGINIA

I, Yilinase Mqadi, notary public in and for the Commonwealth of Virginia, do hereby certify that the forgoing PROCEEDING was duly recorded and thereafter reduced to print under my direction; that the witnesses were sworn to tell the truth under penalty of perjury; that said transcript is a true record of the testimony given by witnesses; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this proceeding was called; and, furthermore, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

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