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Esther Lim

Hello, everyone. Welcome to this podcast featuring Vaishali Udupa, Commissioner for Patents at the United States Patent and Trademark Office (USPTO). I'm Esther Lim, Partner and Chief Diversity and Inclusion Officer at Finnegan. It's a great pleasure to have a conversation with Vaishali, who brings extensive experience from private practice and in-house. Prior to becoming the Commissioner for Patents, Vaishali was a VP and ADC at Hewlett-Packard.

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Esther Lim

She has received many awards for her outstanding contributions in IP, including from Managing Intellectual Property (MIP). Vaishali, thank you for being here today.

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Vaishali Udupa

Esther, thank you so much for having me, and I'm really excited to be here.

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Esther Lim

Let's start from the beginning. Tell us about your personal background and journey and how you found the path to patents and eventually the USPTO.

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Vaishali Udupa

Yes. So, I think for me, just even starting at a very young age, I loved debate, and I love science and math. And so went to engineering school at UVA. And what's funny is, actually, my senior year, the USPTO came to interview. And so I actually interviewed at the USPTO, but they said, sorry, we can't offer you a job.

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Vaishali Udupa

You're not a U.S. citizen. I was born in Canada. And so, they said if you get your citizenship, come back to us. And literally within weeks afterwards, I remember putting in my application for citizenship. And I don't know when it exactly came back, but, you know, I did, and I reached out and I still remember the person I interviewed with--like the name--it had such an impact on me.

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And then at that time, I didn't end up going to the USPTO. I ended up going to law school and things like that. I worked for an engineer as an engineer for one year. And then I after law school, there were many times I thought about coming to the USPTO and then it finally happened--like, years later.

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Vaishali Udupa

So, 26 years later, after my first interview.

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Esther Lim

Wow, it took a long time to get there. But all's well that ends well.

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Vaishali Udupa

Yeah. And so, I worked at law firms. I did prosecution and then did patent boutique and some litigation work. And then when I went over to Jones Day, you know, the billable rate was not as conducive to do as much prosecution work. But I then sort of shifted a little bit to more litigation work and counseling and things like that.

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Vaishali Udupa

And then I was just very lucky to have the opportunity to be at HP, and then Hewlett-Packard Enterprise after the split, with years of working in-house. And so, since I've graduated, I don't think there's a day that's gone by that I haven't worked on some sort of IP issue.

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Esther Lim

So even though you didn't end up at the USPTO when you were first exposed to it in college because of the citizenship status, it sounds like the fact that you were able to work in different environments actually prepared you well for the position in which you were able to join 26 years later?

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Vaishali Udupa

I hope so. I mean, what I will say is that the people that were the commissioner before me, primarily, they've been at the USPTO for many years, so they moved up the ranks, and they were amazing, amazing commissioners. And I still actually have the opportunity to connect with them, reach out to them. We talk about different issues and stuff like that.

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But, you know, I was the first outsider they brought in to be the Commissioner for Patents. And so, I think it's just giving a different perspective from the different experiences that I have. And hopefully, I can be a value, add to the agency. And my appointment is five years, so I'm keeping my fingers crossed that I'll provide some value in the next few years.

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Esther Lim

Well, thank you for your service and congratulations again in assuming the position early last year. Vaishali, as the commissioner for Patents, you oversee more than 10,000 patent employees, which includes 9000 patent examiners for the USPTO. Can you explain the scope of your role and anything that you were surprised by when you started?

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Vaishali Udupa

So, the scope of the roles—in essence, I'm the chief operating officer for the patent division, so you have the United States Patent and Trademark Office and you have the trademark side and the patent side, and there's 14,000 employees at the USPTO. But 10,000, as you stated, fall under patents. And so, it is everything to make sure that our patent division provides for robust and reliable patents in an official and timely manner with high quality, and we make sure that we have good stakeholder experiences and our employees and making sure they have great experiences as employees.

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Vaishali Udupa

So there is a lot of work to be done just with regards to the application and how it gets brought in, how it gets processed, how it lands on the examiners' desks, and there are so many people that are involved with just that process are international obligations that we have, the things we have to deal with I.T.,

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Vaishali Udupa

The training that our employees get, and then what we do with our stakeholders to make sure that we are meeting their needs, and then at the same time we're also making sure that we hit our targets with regards to all that, with how many patents are coming in and what is the quality requirements and what are the pendency that we're trying to improve on.

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Vaishali Udupa

But it is just a full—like, every day. It is something different. There are so much stuff going on and it is just a great agency. I'm just blown away with how wonderful the people are here, how knowledgeable they are, how dedicated they are. And what's really, really interesting is that it runs like a business. So, you know, they have so many different employees.

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Vaishali Udupa

We have over \$3 billion budget per year, and we have to make sure that it's used wisely and in the right way—and that we accomplish our mission. So, the examiners keep up to date with all the case law, the examining procedures and the technology and everything like that. The USPTO is constantly in a state of evolution, like they're always evolving, and they always want to be better.

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Vaishali Udupa

So, I love how they work to do that. And so, I'm just it's just such a great place, and I'm learning so much. And I'm just—like I said, I'm blown away. By the way—the agency itself and the people who work here.

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Esther Lim

It certainly sounds very exciting. You mentioned earlier about being an outsider going to the patent office, having been in private practice and in-house. How has working at HP, for example, which is also a business, it's got a very large budget, it's got big teams. So how is that shaping your views and perspectives in this role as the Commissioner for Patents?

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Vaishali Udupa

Well, I think like not just with regards to HP and HPE—so, a lot of the work that I did was after the patent issues. Right? And what happens? How are the words construed? You know, what are, you know, the scope of the rights or what is the value of the IP? So, bringing that perspective in and what why the prosecution history should be clear, or things like that, and how we can improve on those things.

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Vaishali Udupa

Also understanding, you know, the whole IP cycle because at HP and HPE, there were things that we were doing with regards to what are we trying to get protection for, and how do we adequately do that? Do we go the patent route, do we do some sort of other IP? So those decisions that come in and then what, you know, especially in the tech world, some of these things like—by the time of issue, some of the technologies have already changed.

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Vaishali Udupa

So, like you're trying to figure out how to keep track with that. So that's one perspective and you have to keep that. That's like what I worked in, but then also knowing the global IP space. And so there was a lot

of policy work that I did. So, through the policy work that was happening, I was of course, I mean, I work for tech, so I have to think about what are the tech issues that are happening.

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Vaishali Udupa

But I got to really experience the vast things that are going on in different industries and trying to see how we could balance those. So, I think I had some exposure to that, so I could bring that all in and say, look, we have this mission to get protected, like get the patent rights for people. But we have to understand that we do it in a way that benefits everyone.

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Vaishali Udupa

All different industries are stakeholders, the public. You have to think about them too. And these were things that I had experienced or had some like background from a different perspective that I could bring. And, you know, and also, I think just there's also employment issues that I'm dealing with a lot—there are contract issues that we're dealing with, contracts with our vendors are, you know, the union contract.

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Vaishali Udupa

So, there's also all the other litigation experiences. I had also provided a lot of different value to.

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Esther Lim

There in the role as a CEO, you certainly have to be a jack-of-all-trades. The USPTO announced recently a series of meetings called the Public Engagement Partnership Listening Sessions, in an effort to connect with the public related to the patent policies and procedures. Why are these sessions important, and what does the USPTO hope to gain from them?

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Vaishali Udupa

So I think, you know, when you're talking about what are who are stakeholders, right? You have the many people that come in and they file their patents. And we grant, you know, a patent which is in essence a monopoly for an extended period of time. But another important stakeholder is our public. And you're seeing a lot of—we had some engagements, as many different engagement sessions, for example, some of the FDA listening sessions and things like that.

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And there were these requests that the public wanted to learn more and engage more with the USPTO—so beyond the people who just applied for the patent and things like that. So we said, okay, yes, because they are one of our important stakeholders. And so we could use this as a way to set up listening sessions, to set up more engagement with them so we can hear their feedback and connect with them, listen to their ideas and we can learn what's working and what needs to improve, what we need to improve on and truly what's important to the public.

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Vaishali Udupa

Right? And so we have our first meeting that's scheduled for March 1st in the USPTO headquarters, and it will cover just sort of foundational education about the patent system. And, you know, what are the different things that, you know, provide some value on education. But at the same time, we will be listening and seeing what people think about this and what, you know, what more can we do on the way that we educate or things like that, or what other feedback can we get?

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Vaishali Udupa

So it's just the start, but I think it's a great initiative that we're doing.

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Esther Lim

That's wonderful. What is the best piece of advice you have for someone who is a first-time patent filer?

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Vaishali Udupa

I think what I would say is that, you know, I know the USPTO is the place that you go to get your patents, but it seems like, sometimes, like people might have this misconception that we are a barrier. We are actually here to help, right? And I knew about some of the programs that the USPTO had for people who were trying to file patents, and especially the first-time patent filers.

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Vaishali Udupa

But the breadth of these programs and what the—like the mission and what we're trying to achieve is really we want to increase innovation. We want to have more people to be a part of the innovation system. So we're really trying hard to help bring their innovations to actual, like, patent rights. And so just going through—let me give you some examples of some of the many different programs—so that if we could get the word out, so that people could understand these programs, I think it'd be great.

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So one of the first things we have a lot of first-time filers and pro se people who don't have attorneys. And so we recently had a first-time filer expedited examination pilot program. So, basically, that is a program. If your first time file, you can put it in and you, you know, you want to bring, in a quick way, like', try to get your patent so that you could potentially, you know, get investments and things like that.

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Vaishali Udupa

So that's one of the things that we have. And that pilot is ongoing right now. And we've had 708 applications as of last week. And then we also have if you just go to our website—like the patent basics page, it has such a wealth of information on, you know, simple things like: What is a Patent?, you know— Wat can you get Protection On? What is the Process?

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Vaishali Udupa

We have so many virtual events on patent basics and the path to a patent. So someone can come in and they can be like, "How do I do?" Like—is this a patent? Is this a trademark? Like, you know, because sometimes they don't even understand the difference, like the scope, the different types of IP. And then once you're in the process, we have the inventor assistance center that helps you, you know, with your filing, making sure you have all the things you need to get your filings through when things sort of slowed down a little bit.

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Vaishali Udupa

We have other ways that, like, if you feel like your application is set, you can go to the Ombudsman's and help with issues that arise during the prosecution. And another great initiative that we have done that I'm really excited about is just we've realized that some of these first-time filers and especially underrepresented minorities or women, when you think about, you know, you've been in patents for many years.

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Vaishali Udupa

So we understand like when you hear when you see a rejection, you're not thinking it's a rejection, it's over. You're thinking, okay, this is, you know, I just have to do more arguments. I can get it through. And a final rejection doesn't necessarily mean a final rejection, either. It's not the final one. So what we're trying to do is with regards to, like, the welcome letter, we're trying to help people feel like they can get access because they filed their patent.

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Vaishali Udupa

There's a new welcome letter that comes in that gives all the different assistance programs that we have and ways that you can get pro se help, and then we're also after the first office action, we want to say

again, like, don't get scared. This is just a part of the process. So we're trying everything we can to keep people in the system and hopefully get them that they need.

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Vaishali Udupa

They deserve patent rights that we keep them in and get them to the end.

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Esther Lim

Raising awareness and comfort level goes a long way.

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Vaishali Udupa

Yeah, and understanding the way that people think and when they see things and how we can address some of those fears or things that happen through the process.

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Esther Lim

Obviously the agency has seen an increase in patents containing AI. Can you share with us what the USPTO stance is on AI and how you're managing the increase of AI technology across the board?

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Vaishali Udupa

Yeah, so there are so much that's going on in the AI space, and it's not just the applications that are coming in. It is. And the technologies that are being—it seems like every different technology area, there are some aspect of AI that's filtering through, but then it's we're seeing things about how when someone submits different things at the office, and when they use AI to create the filing or the brief or things like that, and have those so problems that can, you know, fake cases are put into a brief that isn't cite checked because they relied on AI, how we have to deal with those things and then what is inventorship

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Vaishali Udupa

with regards to AI and you know, if—how much does the actual person have to do if they use the assistance of AI—those are also questions that we're tackling right now. And then, finally, our own use of AI. Do you know, there are definitely—like AI is so many benefits, so we have to make sure that we use it responsibly, responsibly and that our stakeholders use that responsibility.

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So these are some of the questions that we're grappling with right now, but some I thought it'd be interesting about some of the numbers that we're seeing. So, for example, recently updated data from a report that the report was issued was called Inventing AI: Tracing diffusion of artificial intelligence with U.S. patents. So there's more updated numbers and that indicates that around 80,000 of our utility patent applications in 2020 involved artificial intelligence.

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Vaishali Udupa

And that's over 150% higher than it was in 2002. And AI now appears in more than 18% of all utility patent applications we receive. And it's, you know, there's a diffusion across all the different fields, like the different technologies that we have and AI appears in about 9% of all technology examined by the US. It was 9% in 1976 and it is now in 2020.

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Vaishali Udupa

When the updated data came in, it was 50%. So there's a huge increase. So that just goes to show, like, there's a lot that's coming in. But we also have this AI Emerging Technologies partnership. And this is an initiative that we had listening sessions and we're trying to decide—like, you know— have people from different areas talk about these types of issues that we're grappling with.

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Vaishali Udupa

But the most recent one in September, we sort of explored all the different ways that the USPTO is using AI within some of the work that we're doing. So some of the work that as my, you know, chief operating officer had that we've been thinking about. And so in our search, for example, we have implemented AI. And so there's more like this—it's like an example of—so when an examiner comes across a reference, they're like, "This is pretty much on point."

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Vaishali Udupa

Then they can hit the "more like this" function, and it will provide similar are more options like for them to look at. And then there's also a similarity search AI function. So that is something that we're seeing an increased use of these search tools by our examiners. And then we're looking at expanding it in the design patent space with regards to searching for figures, which also might be beneficial, and then mechanical arts and things like that.

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Vaishali Udupa

So when we're trying to look for prior art, our chat box that sort of came up recently—chat bot that we just implemented on our website, so you can type in, for instance, "How do I filed a patent? How much does a patent cost?" And it's, you know, sort of updates it and based on, like, different things that people

are feeding into the system and the data that the information we're, you know, we're constantly improving it based on AI technologies.

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Vaishali Udupa

So there's different ways that we are using AI internally. We're also exploring it in our classification process. So how do we classify our patents? And so seeing if I'm working with some of our international partners, partners who are also using and looking into AI, so that's another area that we think that there could be some benefit there. And so we're exploring that too.

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Vaishali Udupa

So it's expansive. All is everywhere, but we have to make sure we use it responsibly. And so there''ll be more guidance that will be coming out from the USPTO in the next coming months, or days or months, that will be addressing many of the issues. On some of the policy issues, too.

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Esther Lim

Well, it is expansive and it's evolving very quickly with the exploding numbers of patent filings in the AI space. Are you able to find enough examiners quickly?

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Vaishali Udupa

That is a huge issue that we're really trying to tackle. So, you know, pendency is really important to us and we need to make sure that, you know, patents come through the door, that we do our best to get things back in a timely and efficient manner. And one area that we're seeing is that with the increase of AI, it's not just like we can say, "Hey, here's AI examiners," because it might be related to a car, it might be related to your kitchen cooking, you know, your other ... whatever you're using for cooking, or things like that.

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Vaishali Udupa

There's so many different things that AI can spread across. And so how do we get both people to get the training that they need and then getting the people in? Because we have a group of people that are—that have the AI background—that get hired and we have so many technology centers saying, "Well, no, I want them, I want them," and they're all fighting over these people.

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So we need to get more in. And that's one of the big things we're working on is with regards to hiring, how we can get people to come to the office and understand the wonderful benefits that working at the USPTO, especially when some of the tech companies in certain areas are going to pay them maybe a lot more.

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Vaishali Udupa

So we're thinking about how do we incentivize people and things like that? How do we—one of the wonderful things about the USPTO is the ability like the telework options. Now, some of the companies are providing telework after the pandemic became more common. But still, some of the companies are saying that you need to come back in the office.

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Vaishali Udupa

Well, we right now, we love our teleworking capabilities. And so if we can, you know, go to every nook and cranny and get these AI people in, and that's what we're trying to do. So that's a big initiative for us.

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Esther Lim

But that's certainly a big plug for more people to go into STEM and to fill the pipeline.

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Vaishali Udupa

Exactly. So there's other initiatives we're doing in that aspect, too. So the pipeline is important and then getting them into our offices and having them work better our way so that they come to the USPTO.

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Esther Lim

On a related note, Vaishali, as a strong advocate for diversity and inclusion, can you share the work you've done in this space to promote DEI?

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Vaishali Udupa

So I think that I can sort of start a little bit about what I've done in the years past. So to me, you know, I think it's so important, like, to get more representation with women in STEM, with underrepresented minorities in STEM and/or just across. Like I also believe we need to get our veterans. We need to get our people in rural areas.

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I grew up in a very small town in Appalachia, and there are so many smart people there, too, and get them to realize like, you know, you can get a STEM degree and there's opportunities for you once you get it because it's, you know, but I think it's just not having the understanding of what the scope and what you can do.

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Vaishali Udupa

And so getting that education out there. So that has always been something that's near and dear to me. So some of the stuff that I've done, whether it's, for example, with the Girl Scouts, I'm trying to reach to girls to get them at a very young age to really understand, like, they have so many wonderful ideas and fostering their ability to be innovators or to get them to understand what happens as a lawyer, and things like that, so that they can do that pipeline to come, you know, be a patent examiner or be an IP attorney or be one of the great inventors, you know, that we have.

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Vaishali Udupa

And so that's really important and did a lot of work going to high schools, you know, in D.C. and different areas and getting people to—same thing. What is IP? How do you protect it? Opening their eyes to different things like that. So one, maybe again, they could be an innovator or something like that or get their ... if they're an influencer, make sure that they get the right, you know, protections and things like that.

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Vaishali Udupa

But or in the alternative, to think about careers in these spaces, but then even within the legal field, there's so much that we need to do to make sure that people, you know, whether it's law firms or inhouse or everywhere else, that, you know, people come in. I just saw a number that, first time ever, that the number of female associates actually was higher than the number of male associates coming in.

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Vaishali Udupa

But then I looked at the charts below and then who are who got partnership, and that number is still not equal. So we still have work to do as we move up and make sure that we provide opportunities for growth and, you know, reaching those next levels. And the same holds true with the USPTO. But I will say what is wonderful here is there is so, so much diversity.

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Vaishali Udupa

There's so much I just really love the different diversity of experiences, geographic locations, different ethnicities, and, you know, everything that I have been really impressed with at the USPTO and, you

know, continuing making sure that we get the best people in the jobs, but we make sure that we have the—the opportunity is afforded to everyone. So everyone thinks—not just thinks—they have a chance.

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Vaishali Udupa

And then we ultimately get the best people filling the roles and so having those opportunities here. But it's also what, you know, especially if you look at Kathi and what she's doing in this space and I'm so glad to be working with her about increasing in mentorship so that we capture more women, we capture more underrepresented minorities or things like that.

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Vaishali Udupa

Like I was saying, the veterans base and rural America, like, I think this is all like just great, amazing work and I'm excited to be here and be a part of that.

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Esther Lim

Yeah, I hear a lot of excitement as you talk about so many different types of initiatives and programs, each of which has a great impact, a positive correlation in someone's life that you touch. You mentioned the IP Patch program for Girl Scouts, and I just want to put a big plug in for that personally. We hosted that event at Finnegan a number of years ago and both of my girls participated in that program, you know, on a Saturday.

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Esther Lim

How can you get over 80 young kids excited about inventing and to learn about IP, not just about patents, but how you trademark things, how you copyright things, and then at the end of the day, actually get your invention that you wrote up in a summary stamped as, you know, approved by a representative of the patent office.

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Esther Lim

It was so cool. And the beautiful thing about events like that for me is seeing for the first time they're exposed to invention and intellectual property. And it makes that seem accessible, like it could be a reality for them. And, you know, seeing those light bulbs go on in their heads, it was such a rewarding day.

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I completely agree. I was ... I know through the program. I love it when they, you know, they talk about the founder of the Girl Scouts and her patents and, you know, you get to we explain those. And then there was this exercise where we ask that each time, like, ask the girls—like, just think about things that you find you could innovate or, like, do you have any inventions?

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Vaishali Udupa

And they were, like, thinking about it. And I was, like, "Look at your ideas, you know, and look at what you're coming up with." And I was blown away. They identified so many problems in sort of innovative ways that they could think about how the solutions and getting that mindset and, you know, these young minds at an early age that they can be these problem solvers and create innovation is so important.

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Vaishali Udupa

And I will say, like, I remember going to my son when he was in second grade, like, I'd wait for him and there was a window and everyone put their hopes and dreams, and there were so many different hopes and dreams. But it's by second grade, it was "That I want to get better in math." It was predominantly something or science that the boys would be saying, and the girls would be saying something else.

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Vaishali Udupa

And I was like, "Well, how do we get them to also think about, like, science and math or what flips, and at what point to the flip that they think that they can't be good at science and math? And how do we make them realize this?" Like, no, you can be good in science and math, and it's just that no one has ever told you have all that, you know—so often there's something going on and I still haven't pinpointed where it's happening or how it's happening.

00:33:16:24 - 00:33:24:22

Vaishali Udupa

But I think that everyone has that ability, and we need to just get more people on seeing that, especially at young ages.

00:33:24:24 - 00:33:48:16

Esther Lim

That's so true because it does happen. It does happen as early as primary school and you see that continuing and the gaps are growing bigger. And a lot of it may be the internal and external messaging that they're getting, not even consciously about expectations and roles.

00:33:48:18 - 00:34:10:03

So I was lucky. I will say my mom, my mom was a math professor. And so when she came to the US and, you know, she stayed at home, but she was my math, my secondary, she was my math teacher. So when I didn't understand math test, I would come to her, and then all my friends would come to her.

00:34:10:05 - 00:34:34:18

Vaishali Udupa

And so for me, it was never in my mind that a woman couldn't do math. And my competence in math became—was so strongly tied to the fact of seeing my mom and how great she was at math. And so I think it helped in creating those role models and things like that so that people can look up and say like, "Wait, she can do it.

00:34:34:20 - 00:34:36:16

Vaishali Udupa

I can do it too."

00:34:36:18 - 00:35:03:10

Esther Lim

Yeah, it's really interesting how those life experiences can form your path forward, even in ways that you don't recognize at that time. And for me, as an immigrant, non-English speaking, coming into seventh grade and not being able to speak or do anything in the classroom, they the only thing that I could do was algebra—didn't speak a word of English.

00:35:03:12 - 00:35:31:17

Esther Lim

And while people just assumed that I was some kind of a math genius, because here I am, I don't understand anything that's going on. But in math, I was getting A's, and so I think that might have shaped my interest and love of math and ultimately double-majored in computer science and math. But in primary school, when I was growing up in Korea, that's not an area where I thought I had a particular forte.

00:35:31:19 - 00:35:53:00

Vaishali Udupa

And so it's so interesting how, like, these little things that happen in our lives have such an impact. And so I think at the USPTO or just even the work that I'm doing is, like, how can we have those little impacts that ultimately spread to more positive change and things like that?

00:35:53:02 - 00:36:02:10

Esther Lim

Yes, absolutely. So on that note, let's talk a little bit about the Women's Entrepreneurship Program, and could you tell us what was the driving force behind the initiative?

00:36:05:06 - 00:36:35:03

Vaishali Udupa

Yeah. So I think this is a wonderful initiative that Kathi was really committed to, and then I got to join on board as—I think a couple of months before, maybe it was two months or one month before I started, like that's when it was launched. But again, it was this notion that, you know, how do we get more women into the innovation and ecosystem?

00:36:35:05 - 00:37:02:16

Vaishali Udupa

And so it was this I first is like and there's like three buckets, right? What is the IP that you have? And so it's simple as, like, some of the programs that they've had is—like explaining where the different types of IP and, you know, how do you get your patent, and things like that. So how do you patent trademark all the different things that are out there.

00:37:02:16 - 00:37:23:22

Vaishali Udupa

So they launched the IP Identifier and so—like easy questions that you can plug in and you can say, like, "I have X, Y and Z," and then it can tell you like these are two different types of IP so people can understand that. And again, it's like the woman entrepreneurship. I get it because it was tied to women, but know that anyone can use it, right?

00:37:23:22 - 00:37:53:14

Vaishali Udupa

So it's, it's for anyone. So that IP identifier, anyone can use that. And then—what are the—how do you get financing? So you have your innovation, how do you bring it to market. Or different sort of things to fund it. So there's a whole aspect of the programing that addresses that because you can have great ideas, but then how do you take it to the next step?

00:37:53:16 - 00:38:17:16

Vaishali Udupa

And then finally, about building your networks, because so much of the success of—if you look at different people who can bring their innovation to market in a very successful way, it's the networks that you create. So creating those networks out there so that sort of there's a basic overview of what's there. But I think it's really important of why.

00:38:17:16 - 00:38:59:22

So, you know, women represent the fastest growing category of entrepreneurs worldwide, and—but they are less likely to secure capital and IP protection they need and they're severely underrepresented as business owners as compared to men. So in 2022, 1.9% of the 200 billion VC went to women, just 1.9%. And that was a drop from the previous year, which was at 2.4%.

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Vaishali Udupa

But if you look at investments in startups with at least one female founder, they outperform all male-founded companies by 63%. So investing in women, you get great results. And so it's so important to make sure that we really bring them into the innovation ecosystem and then we give them the abilities, get them the access to funding.

00:39:29:21 - 00:40:01:21

Vaishali Udupa

You're going to see great results. And so it really is about lifting women up and tapping into their potential and so I think that's sort of like the impetus for all this. And I think we talked about this a little bit before, is also how do we tap into this at a young age? So that's another really important thing to encourage people to get into math and science before they get turned off to it.

00:40:01:23 - 00:40:32:17

Vaishali Udupa

And then finally, how do we increase women in STEM the STEM workforce? So let me give you some more numbers. Women make up 51% of the total population, but only 35% of those women are employed in STEM occupations. And so women account for only 16% of the engineers working in STEM jobs. So, I mean, it's definitely really important that we want to increase the amount of women entering these positions.

00:40:32:19 - 00:40:50:09

Vaishali Udupa

And so anyway, that's like what was the impetus for it. And I think we're seeing some wonderful, wonderful programing and hopefully we're having strong impact. I think we are—to getting more women into the process.

00:40:50:11 - 00:41:04:07

Esther Lim

Yeah, the numbers you share are really stark and jaw-dropping and to realize it's still happening, you know, in 2023, 2024 timeframe.

00:41:04:09 - 00:41:28:00

And then another thing I will say is, like, if you get—and you just look at the salaries, right? So for the women who are STEM workers and just imagine like we get in, STEM workers make generally more money than non-STEM workers. So just by getting more women into it, we're increasing the, you know, providing an economic benefit to them.

00:41:28:02 - 00:42:03:01

Vaishali Udupa

But we still have work to be done because male workers in STEM, they make on average 65,000, but female workers still only make 60,000. But the gap worse worsens when you have a bachelor's degree, and the men in STEM, they have they make 97,000. But the female STEM workers with a bachelor's degree only make 74,000. So I think we're saying about, like, how can we help with some of these issues?

00:42:03:01 - 00:42:09:01

Vaishali Udupa

And there's so much that can be done. So this is sort of how we're like trying to tackle this.

00:42:09:03 - 00:42:42:14

Esther Lim

Right. And the fact that you highlighted the study that where you have at least one woman involved in startups, their success rate increases around 60%. And that really underscores the studies that we all know about, that diverse teams produce better work product and they make better teams. So I really appreciate all the statistics that you shared with us too, to really highlight that important disparity that's still ongoing.

00:42:42:16 - 00:42:53:19

Esther Lim

What challenges have you confronted as a woman of color in STEM as we talk about encouraging and promoting other women to go into STEM?

00:42:53:21 - 00:43:40:17

Vaishali Udupa

You know, I think it's been ongoing, and it's been ... it's hard to be an advocate in a way for others, but also like your own experiences. Right? So I remember even when I was working right after engineering, I worked right after engineering school on a construction site building a semiconductor plant. So I was a

project engineer and I was a I think I was 21- or 22-year-old female, walking on to a construction site on a fast-track project and trying to tell people, like, "I am not going to make your copies.

00:43:40:19 - 00:43:50:04

Vaishali Udupa

I am the person that's going to help streamline your processes to make things more efficient and make sure that we get our project done on time."

00:43:50:06 - 00:43:52:14

Esther Lim

Copies and no coffee.

00:43:52:16 - 00:44:13:12

Vaishali Udupa

Yeah. And so it was something like they first looked at me, They're, like, "Who is this person?" And then it took time. It was about building trust and showing your value add. And you know, I remember by the end of my time before I went to law school, there are—I mean, these people became—I mean, I had built that trust and they would do anything for me.

00:44:13:12 - 00:44:34:10

Vaishali Udupa

And I remember they were they were like helping me move into my loft. And I knew law school apartments and stuff like that because they all had all the trucks and everything—like, they were so loyal. And four years later, they were just, you know, because again, once you build trust, you can build like you show like, you know, it lasts forever.

00:44:34:12 - 00:45:04:00

Vaishali Udupa

And so then even going into the law firms, I remember just being, you know, in the DC office at Jones Day, you know, being one of the only female associates in DC. They had others, but, you know, and then the times that like when you are going on maternity leave and those, you know, how do you balance that—like juggling, you know, taking maternity time off, but then getting back transition to onto product projects.

00:45:04:02 - 00:45:35:08

Vaishali Udupa

So I remember like how I was trying to deal with all that. So then when I went in-house, I made a strong effort, just like if someone who was like my outside counsel went on maternity leave, I would be, like, "Well, when are you coming back? And I'm not asking because take as much leave as you want, but I'm going to make sure that I will tell the partners that they have to be brought back on so that they don't have to struggle with those transitions, making it that it will be done so that it's easy."

00:45:35:10 - 00:45:40:24

Vaishali Udupa

But then even having the call saying, "Look, I know you're a new mom.

00:45:41:01 - 00:46:04:17

Vaishali Udupa

I know how important certain skills are you have to develop. So if you want to, I have these depositions coming up. I will ask you, are you ready to travel and be away from your baby or do you want to do the depositions? And whatever your decision is, that's what I will tell the partner that, hey, I want ..." And so I remember one of them saying, "I want I want the depositions."

00:46:04:17 - 00:46:23:14

Vaishali Udupa

And I was like, okay, well, then we'll make sure you get the depositions and making sure that they got that work and so that there wasn't these assumptions, like, "Why should we ask her or not? She's a new mom." Like, I did those questions behind the scenes so they didn't have to deal with them with the partners at the law firms.

00:46:23:16 - 00:46:40:06

Vaishali Udupa

So I think it's so important as people who go through their own experiences to try to remember what it's like and then help those who are coming after so that it's an easier path.

00:46:40:08 - 00:47:09:15

Esther Lim

It goes to the importance of having diverse leadership who bring different experiences and perspectives. And you gave a very concrete example of why that's important for a certain demographic of lawyers, and I really appreciate that message as well—as the importance of paying it forward and making it a bit easier for the next person who confronts that issue.

00:47:09:17 - 00:47:22:03

Esther Lim

What advice, Vaishali, especially do you have for girls and young women interested in an IP career about how to get their foot in the door and starting a career?

00:47:22:05 - 00:48:05:16

Vaishali Udupa

I guess the advice that I have is that one, the sky's the limit. I think it is such a great field to be a part of. It is for me personally, the ability to deal with cutting-edge technology innovation on a day-to-day basis and advocating—whether it's patent policy or it's the different ways that we work to get those innovations to market—is such a wonderful field to be in. And it has impact because think about every single day—what the different innovations that we are dealing with from this, you know, the very little innovations.

00:48:05:16 - 00:48:30:07

Vaishali Udupa

I mean, I think about like just even the things I'm doing with my kids, like screen time, you know, how you click parental controls or you think about, you know, how the technologies the kids use to get their work done and things like that, or how our lives are easier with technologies, help us cook our food faster so we can get food on the table.

00:48:30:09 - 00:48:58:08

Vaishali Udupa

There's so much that you can have an impact and so get them excited about it. I want them to understand that it's just such a wonderful thing and there's so many different aspects of it so that depending on who you are, if you want to be the one arguing the cases in court, you can do that. Or if you want to be the one working with inventors on a day-to-day basis to learn every day about different inventions, you can do that.

00:48:58:08 - 00:49:01:07

Vaishali Udupa

And there's so much that can be done.

00:49:01:09 - 00:49:15:16

Esther Lim

Well, your enthusiasm is contagious, and I certainly share in that enthusiasm. Would you mind sharing with us what philosophy you live by at work and in life?

00:49:15:18 - 00:49:56:23

Vaishali Udupa

So for me personally is—I think "leading with kindness" is to me the most important thing. There are so many ways that you can get to your mission, right? And you can do that by stepping on other people. You can do that by not understanding the struggles of other people or alternatively, and I strongly believe you can be the most effective leader if you do it with kindness because you're lifting people up as you're doing it.

00:49:57:00 - 00:50:30:21

Vaishali Udupa

And so that is something that's really, really important to me and is whether the people that work with me, I really want others to have that mentality is that we think so much about how you can get things done. You can do it in a nice way, you can, I don't know. That's like probably my biggest thing for me is just think about and even like—I'm not perfect, I am ...

00:50:31:02 - 00:50:59:08

Vaishali Udupa

There's so many different things that I could get better at, but how can I do it in a way that I can help the most people possible? I think sometimes when you're in these roles, there are ... you have to get tough skin and you have to have the ability to take criticism to try to constantly improve, make sure you're doing things.

00:50:59:10 - 00:51:21:12

Vaishali Udupa

People understand you that your words have meaning. And so make sure that your message is clear and it's getting across. And if you make a mistake—that you have the—you don't have the ego and you have the ability to go out and try to correct yourself and do it in a way that you build trust. I think trust is really important.

00:51:21:18 - 00:51:45:23

Esther Lim

Leading with kindness is such a beautiful philosophy and something that this world can use more of everywhere in the workplace and outside. It's been a wonderful conversation with you. I'd like to give you a chance to add any final words that we didn't cover today.

00:51:46:00 - 00:52:12:08

Vaishali Udupa

I think we covered a lot. But again, you know, I think I have been blessed with a wonderful opportunity to come to the USPTO and try to, you know, bring some of the value add that I hope that I can bring to make the agency and the patent business unit. They've already they operate at such a wonderful—they do so many great, amazing things.

00:52:12:08 - 00:52:31:12

Vaishali Udupa

And I just want to add to that and help us constantly approve. So I'm blessed to have that opportunity. But I also want to put it out there if there's other people who want to join in the mission, we are always looking for great people, so we're hoping others can join. Or also, I think it's really important not just join the USPTO, but to collaborate with us.

00:52:31:14 - 00:53:02:16

Vaishali Udupa

We are constantly—we care about stakeholder feedback. We have wonderful, you know, for example, we meet with IPO quite often. AIPLA, other organizations and we talk with them and like—what's working, what's not? So if you're hearing this and you want to collaborate and you have ideas, send them our way. And you know, we want to improve and make the agency be the best agency it can be.

00:53:02:18 - 00:53:28:21

Esther Lim

Thank you so much. We really appreciate your sharing your experiences and demystifying some of the processes and things that are going on at the USPTO. I'd like to thank you for your service and leadership at the USPTO as the Commissioner for Patents, and I hope the audience enjoyed our discussion with Commissioner Vaishali Udupa. Thank you for coming.

00:53:28:23 - 00:53:33:15

Vaishali Udupa

Thank you so much for having me. Esther, This is great. Thank you so much.