

U.S. PATENT AND TRADEMARK OFFICE

IN THE MATTER OF:)
)
UNITED STATES PATENT)
AND TRADEMARK OFFICE)
NON-FUNGIBLE TOKENS STUDY)
)

Tuesday,
January 26, 2023
The parties met remotely, pursuant to notice, at
10:00 a.m.

PARTICIPANTS:

KATHI VIDAL, Undersecretary of Commerce for Intellectual property
and Director of the U.S. Patent and Trademark Office
DAVID GERK, U.S. Patent and Trademark Office

Panelists, Session 1:

JOSEPH WOLFE, DLA Piper
NELSON M. ROSARIO, Rosario Tech Law LLC
GIOVANNA FESSENDEN, Hamilton, Brook, Smith & Reynolds, P.C.
MARK STIGNANI, Barnes and Thornburg LLP
DAVID HARDOON, Wang Hardoon P.C.
RYAN CHOWDHURY, Fish & Richardson P.C.
MICHAEL KASDAN, Wiggin and Dana LLP
DOV GREENBAUM, Yale University; Reichman University (IDC) Herzliya
MIKAL-ELLEN S. BENNETT, Kindcaid and Associates, PLLC
KRISTOPHER KASTENS, Kramer Levin Naftalis & Frankel LLP
MAURICIO URIBE, Knobbe Martens
JOEL BOCK, Dentons US LLP

Panelists, Session 2:

DOROTHY HARAMINAC, GreenVets, LLC and Kiribex
LEANN PINTO, IPwe, Inc.
ROBERT MOWRY, Rekttech
KARY OBERBRUNNER, Igniting Souls & Blockchain Life
CLEVE MESIDOR, The Blockchain Foundation
LUCINDA LEWIS, Car Culture, Inc.
PATRICIA MACKENZIE, Independent Creator

MERAV OZAIR, Wake Forest University; Emerging Technologies Mastery
RAM SHANMUGAM, Heera Digital
PAMELA NORTON, TitleChain

1 views will help us with our report in response to the Senate IP
2 Subcommittee's request for a study on how NFTs impact intellectual
3 property. So very critically important to a lot of what we do, and
4 your comments could not come at a more critical time.

5 NFTs are seemingly everywhere. They are now being used in
6 connection with products and services in such industries as music,
7 fine arts, sports, finance, medicine, and so many others. Aspects
8 of the technology are being integrated into new patent applications
9 that we are seeing, and NFTs are being used to track ownership of
10 patent assets.

11 Our work on NFTs is part of a broader umbrella of work that we
12 are doing around AI and emerging technologies. We invite you to be
13 involved not only more deeply in our work on NFTs, but also on
14 other emerging technologies.

15 Please check out our AI Emerging Tech Partnership. This work
16 is going to influence our policies around AI and all types of
17 emerging technologies. It will also help us implement those
18 technologies to better serve our customers. I just want to let you
19 know there is an upcoming session on AI Emerging Technology that
20 will be held Wednesday, February 8, in the Dallas, Texas office and
21 will also be remote and the topic is innovation-driven AI.

22 So please stay engaged with the USPTO. Watch our channels. We
23 are doing everything we can here at the USPTO to incentivize more
24 innovation, for more people from around the country, to make sure
25 we have the policies and laws to protect that innovation and to
26 bring it to impact.

27 And we're especially focused on the technologies that matter
28 to the country, and on emerging technologies. We are making sure
29 that we have the laws and the policies to protect the innovation
30 and get that innovation to impact.

1 I just want to mention two quick initiatives that we're
2 working on - the Council for Inclusive Innovation, as well as our
3 recently launched Women's Entrepreneurship Initiative. Again, these
4 are meant to give broader access to everyone while we work within
5 the USPTO on our policies and laws. We welcome your participation
6 in all of these initiatives.

7 Again, we look forward to your comments and input today. And
8 look forward to receiving your written submissions, due a week from
9 tomorrow, on February 3. Now I will turn it over to David Gerk and
10 the team and thank them for all of their hard work in organizing
11 today's event. Thank you.

12 <DAVID GERK> Thank you, Director Vidal, for your insights and
13 remarks this morning. We are very pleased to have had you join the
14 discussion today. And welcome panelists and audience members. As
15 mentioned, I'm Dave Gerk, Principal Counsel and Director for Patent
16 Policy in the USPTO's Office of Policy and International Affairs,
17 and I'm very pleased to be moderating today's roundtable.

18 During this panel, we will hear from panelists who have
19 knowledge and experience regarding the technological aspects of
20 NFTs, NFT platforms, and NFT's relationship to both the underlying
21 assets they define and intellectual property rights in those
22 assets.

23 As the Director shared, your input is critically important to
24 help ensure we have a full understanding of these emerging
25 technologies, including any challenges and opportunities they
26 present for IP holders and new entrepreneurs to obtain, protect,
27 and enforce their rights.

28 During your remarks, we invite you to address any issues you
29 believe are relevant to the joint study being conducted by the
30 United States Patent and Trademark Office and the United States
31 Copyright Office. You may address the questions posed in the USPTO

1 and U.S. Copyright Office's joint Federal Register Notice published
2 on November 23, 2022, or you may raise additional issues you
3 believe are important for the Offices to consider as we conduct
4 this study.

5 Before we begin, I'd like to remind everyone of a couple
6 ground rules for today's panels. We were fortunate to have a large
7 number of speaking requests for today's roundtable, so we will hear
8 from a number of diverse perspectives today.

9 To ensure that all panelists have sufficient opportunity to
10 provide their perspectives, we have asked the speakers to limit
11 their remarks to 10 minutes each and to prioritize the issues they
12 believe should be raised. We will strictly enforce this time limit
13 throughout today's panels. Of course, we welcome panelists to
14 expand upon their remarks by submitting written comments in
15 response to the USPTO and U.S. Copyright Office's joint Federal
16 Register Notice. The deadline, as mentioned, for submitting such
17 written comments is February 3, 2023.

18 With that, why don't we begin? Our first panelist today is
19 Nelson Rosario. We invite you to please provide your remarks at
20 this time. Thank you. Do we have Nelson? Why don't we move on and
21 go to Joseph Wolfe, please?

22 <JOSEPH WOLFE> Thank you, David. Okay. My name is Joseph
23 Wolfe. I'm an associate at DLA Piper. At DLA, I primarily handle
24 preparation and prosecution of patent applications, specifically in
25 the software space. So, of course, I've seen and handled a fair
26 amount of NFT-related inventions the past couple of years.

27 So my remarks will primarily focus on the types of innovations
28 that we've seen, as well as the patent-related challenges to kind
29 of protecting these NFT-related innovations. So in terms of how
30 we've seen NFTs being utilized, and when seeking patent
31 applications, we see them used in a variety of cases, but of

1 course, mostly as a means to authenticate an underlying asset,
2 whether that asset be a digital asset, so we think of, in the
3 conventional sense, of an image, a video, a GIF, a physical asset,
4 so think a proof of authenticity for a baseball card or some sort
5 of service.

6 We've also seen kind of more unique digital assets, if you
7 want to call them digital assets, being associated with NFTs. So
8 think about a digital asset being an identity token for an
9 individual. So this identity token can be stored as an NFT and be
10 utilized as a means to authenticate an individual with certain
11 institutions. So during the creation and storing process, the
12 individual's identity can be confirmed by a trusted agency so that
13 downstream institutions do not have to go through the process of
14 reauthenticating the individual. They can instead rely on the
15 information that's in the token.

16 In another example, we've seen digital assets be like an eSIM
17 profile. So if you think about the cell phone registration process,
18 especially when you want to download a new eSIM, an eSIM profile
19 can be stored in the metadata of some sort of token that's stored
20 on the blockchain.

21 So while, of course there are a lot of examples where NFTs
22 are-- protections being sought, in the case of NFTs associated with
23 specific assets, there are a lot of applications that aren't tied
24 to assets themselves. So think about applications and inventions
25 for improving the process of generating or minting an NFT. So think
26 about some processes, such as improving on-chain storage, so
27 reducing the amount of data that could be stored on chain if an
28 individual would like to store the underlying asset on chain
29 compared to off chain.

30 Improving the security of NFT storage-- so this is focused on
31 kind of wallet security or improving, simplifying, or automating

1 the minting process. These are all applications and types of
2 inventions we've seen within the NFT space.

3 So now, turning to patent-related challenges associated with
4 NFTs, I think most of the issues that are applicable to NFT
5 innovations are shared across technology areas, such as blockchain
6 to a larger extent, as well as software applications even broader
7 than blockchain.

8 But focusing on NFT, of course, the two areas that get
9 discussed the most are subject matter eligibility and novelty,
10 nonobviousness considerations.

11 For eligibility, which everyone knows is a big one, I think it
12 really comes down to the type of NFT innovation you are pursuing
13 protection on. So, as I mentioned earlier, if we break down NFT
14 inventions into two categories, for example. So the first category
15 being tying an NFT to an underlying asset and the second category
16 being improvements to the NFT process.

17 When we focus on the latter case, the improvements to the NFT
18 process, such as creating, minting, maintaining, or improving kind
19 of storage processes, I would say that I've seen the eligibility
20 hurdles be a bit lower because these improvements typically focus
21 on improvements to the technology space and in some circumstances,
22 improvements to the computer itself.

23 So, for example, if we think about improving on-chain storage
24 by reducing the memory requirements or reducing the amount of data
25 that we have to store on chain, somehow that can improve the
26 underlying operation of the computer itself.

27 Now, things get a little trickier when we talk about
28 eligibility in the context of the former case. So tying an NFT to
29 an underlying asset. In the former case, I could see - and I've
30 seen - eligibility challenges during prosecution. But at the same
31 time, I don't think that they are this insurmountable hurdle that

1 one would expect them to be. A carefully drafted application that
2 takes advantage of those eligibility guidelines from 2019 should at
3 least anticipate or avoid a challenge.

4 Because when you consider those subject matter groupings,
5 we're talking now mathematical concepts, mental processes, certain
6 methods of organizing human activity, these latter two groupings,
7 mental processes and certain methods of organizing human activity,
8 seem to be very prevalent to the NFT space.

9 For example, mental processes. It all comes down to how the
10 practitioner has drafted the claims for your invention. At a higher
11 level of generality, you can see a circumstance where an examiner
12 could issue an eligibility rejection on a mental process ground.
13 But if you incorporate elements, such as broadcasting the token to
14 a blockchain or something more specific than that, now you take it
15 out of the realm of a mental process and possibly avoid that
16 grouping.

17 Now, for certain methods of organizing human activity, that
18 comes down to what is your use case for this NFT? So I think the
19 example I provided above was in the context of an identity token.
20 So if you're using an identity token for a financial workflow or
21 you're using it to authenticate yourself with a bank, that could be
22 a circumstance that falls under a fundamental economic concept,
23 which would fall under that grouping.

24 So in those circumstances, it's important to kind of build up
25 in your application this narrative that explains why this is an
26 improvement and why the NFT application here isn't this "abstract
27 idea," but has these technological improvements that provide this
28 practical application, so you set yourself up to overcome these
29 rejections during the examination phase.

30 So while, of course, I do think eligibility is a consideration
31 that applicants should consider when pursuing patent protection, I

1 don't believe it's this insurmountable hurdle. What I think could
2 be very helpful is if the USPTO comes out with additional
3 eligibility examples for this technology space, specifically
4 different types of NFT innovations that could be used to assist
5 applicants' practitioners, both during the drafting phase and the
6 examination phase, something that we can cite to that would help us
7 during this process.

8 And of course, I want to touch on novelty, nonobviousness, not
9 the most groundbreaking topic in patents, but with the increased
10 visibility and discussions surrounding NFTs the last few years,
11 there is an abundance of prior art out there in the non-patent
12 literature space. So if applicants or practitioners are performing
13 a prior art search, it would be prudent to consider a broader
14 search outside of patent databases. So consider Google. There's a
15 lot of YouTube tutorials out there that explain kind of the NFT
16 process and the NFT use cases.

17 So while eligibility, of course, is a consideration, there are
18 also considerations on the novelty, nonobviousness front due to how
19 popular NFTs have been the past couple of years. So I'm just coming
20 up on the 10-minute mark and I will stop my remarks there. Thank
21 you.

22 <DAVID GERK> Thank you very much, Joseph, for those insights.
23 We have Nelson with us, so why don't we turn back so we can keep
24 moving, try and work through the agenda in order. So Nelson, please
25 feel free to provide your remarks. Thank you.

26 <NELSON ROSARIO> Thank you, David, and thank you to the Office
27 and everyone involved in putting this together. Happy to be here
28 and provide some remarks. My remarks are going to be at a fairly
29 high level and kind of general based on my experience in this
30 space.

1 So I feel that a little background on myself is in order to
2 kind of frame where I'm coming from and why I think this is an
3 important conversation. So I'm Nelson Rosario. I'm the founder of
4 Rosario Tech Law, a boutique firm based here in Chicago, Illinois.
5 I work with emerging technology companies and many companies that
6 are operating in the kind of Web3 crypto space. I have been doing
7 IP-related work in this space since about 2016. And I've worked
8 with a lot of different scale companies, from large, multinational
9 corporations down to kind of seed-stage startups that are trying to
10 figure out how to deploy this technology.

11 And in addition, I also am an adjunct law professor at
12 Illinois Tech, Chicago-Kent College of Law, where I've been
13 teaching a class called "Blockchain Cryptocurrency and the Law"
14 since January of 2018 that kind of covers the technical background
15 of this industry, as well as the legal issues that are raised by
16 the kind of new, innovative approaches to exchanging value on the
17 internet and information.

18 So I know that the purpose of the study being conducted by
19 both Offices is to kind of dig more into what is going on with NFTs
20 and how they may impact intellectual property rights in general,
21 and so I think it's important to kind of take a step back and take
22 a look at what's actually new and innovative here. I have supreme
23 confidence that the Office will be able to kind of figure out the
24 actual technical functioning of NFTs, although I'm sure if you were
25 to ask every member of this roundtable to define what an NFT is,
26 you would probably get a different answer from every single person.

27 So, as I said, my comments are more high level in general, but
28 it's important to start kind of at the beginning and what's
29 actually new with blockchain and cryptocurrency and NFTs. And with
30 the introduction of Bitcoin, we for the first time had unique
31 digital property that was able to be transacted on the internet

1 without the use of a central counterparty. That was kind of one of
2 the principal innovations brought about by its introduction. And so
3 what that enabled was censorship-resistant value transfer on the
4 internet and we just didn't have that before.

5 Now, a lot of things have come since that time, including
6 NFTs, smart contracts, etc. And it's important to kind of bear in
7 mind that characteristic that's enabled by this technology, that
8 idea of censorship resistance. NFTs are kind of an iteration that
9 builds off of that innovation and they allow for this kind of
10 decentralized authentication of information. We've seen it kind of
11 mostly in the popular consciousness with respect to art. That was
12 kind of the craze in 2021, carried over into 2022, and still to a
13 certain degree today, depending on who you talk to. But that idea
14 of kind of decentralized provenance is a logical extension of that
15 initial idea of censorship-resistant value transfer.

16 So I mentioned those kind of two characteristics because I
17 think they present a lot of opportunity and also a lot of
18 challenges for the Patent Office as they kind of move forward. I
19 thought that the previous speaker did a great job highlighting some
20 of the different use cases of how people are thinking about NFTs. I
21 know of people that are using them in much the same way as you
22 would have any other kind of physical collectible, but a digital
23 kind of replica of that, that's more easily tradable with anybody
24 around the world. But there's also people that are building out
25 systems that treat NFTs in a sort of, kind of rights management or
26 access type way, right? If you are an NFT holder, then you are able
27 to gain access to a particular social event or club, etc.

28 Now, the reason that the technology is kind of being built out
29 like this, and why technologists and many of my clients and other
30 individuals' clients here are excited about it is that kind of
31 decentralized, kind of censorship-resistant aspect, right?

1 I'm really focused and intrigued by people that are building
2 solutions on these public, permissionless blockchain networks, most
3 popular of which are Bitcoin and Ethereum. Most of the attention is
4 focused on the Ethereum blockchain. That's kind of where most of
5 the NFT activity is.

6 And so this new paradigm where we have unique digital
7 property, censorship-resistant kind of authentication enabled by
8 these public, permissionless networks, where we don't have that
9 central counterparty in the middle, is going to lead to new ways of
10 people interacting, new ways of organizing human behavior, new ways
11 of people doing things that we can't even really imagine just yet.

12 It may take a long time, it may not. It really depends. But I
13 think the challenge for the Patent Office and other kind of
14 government entities that are trying to figure out, okay, how
15 concerned or interested or how can we leverage this technology, is
16 going to be that public, permissionless network kind of nature of
17 these networks where most of the technologists are most interested,
18 right?

19 Because in a public, permissionless blockchain, anyone can
20 join the network and participate at any time. And that, rightfully
21 so, gives kind of government agencies, regulators, etc., a pause
22 because it's giving up a measure of control.

23 So, just as an example, with respect to patents, I know that
24 there has been a lot of interest in trying to create a kind of
25 private patent ownership chain, let's call it, where it's easier
26 for individuals to kind of buy and trade, buy and sell patent
27 rights. And NFTs are one way that you can at least express the
28 intention of buyers and sellers for the trading of those rights.
29 Now the hiccup becomes well, is a government agency like the U.S.
30 Patent and Trademark Office going to recognize that as a valid
31 transfer of rights? Is a federal judge in a dispute going to

1 recognize that as a valid transfer of rights? The answer may be
2 yes, but that sort of infrastructure is going to need to be built
3 out for people to kind of realize those streams and for a kind of
4 private parallel market to be built up.

5 And there is a decent chance that for it to really leverage
6 what's new and unique, it would have to be built on a public,
7 permissionless blockchain network. And I'm not entirely sure where
8 that's going to go or what that will look like, but I do think it's
9 something that the Office needs to kind of think deeply about
10 beyond just kind of the technical underpinnings of how these things
11 work.

12 And with respect to patentability issues, what sort of
13 innovations do we think are worthy of protection?

14 And one more point, as I'm getting closer to time here, is as
15 people become more comfortable with the ideas of NFTs, the idea of
16 NFTs being a sort of-- some people call it a receipt or a pointer,
17 some sort of authentication, verification, proof of provenance with
18 respect to some sort of physical or digital item, I think that will
19 become much more prominent as we see this idea of the metaverse
20 kind of build out. Whether or not it's a metaverse that's built on
21 public, permissionless blockchain network, of which there are some
22 that are kind of developing as we speak, or it's a private kind of
23 metaverse, as being built by companies like Meta, etc. NFTs are
24 going to go a long way to help us try and figure out, well, who
25 exactly owns what. But again, that runs into the same problem
26 mentioned before of, well, how exactly is the government going to
27 recognize these kind of ownership claims?

28 So those are really the two main points that I wanted to bring
29 up in my remarks today. I think I'm close to time, so I'm going to
30 wrap it up and just say thank you for allowing me a chance to share
31 my thoughts.

1 <DAVID GERK> Thank you very much, Mr. Rosario. We'll move on
2 to our next speaker, Giovanna Fessenden, please.

3 <GIOVANNA FESSENDEN> Thank you, David. Pleasure to be here
4 today. Thank you so much. This is very exciting. I'm grateful that
5 the PTO and the Trademark Office and the Copyright Office are all
6 being sort of thought leaders by organizing this kind of
7 roundtable.

8 So my name is Giovanna Fessenden. I'm a patent attorney. My
9 background is in computer science. I have been practicing in the
10 software space protecting innovations for over 20 years. I am an IP
11 attorney at Hamilton, Brook, Smith, and Reynolds, and I'm also on
12 the Board of Directors of the Berkshire Innovation Center.

13 As a patent attorney who's extremely passionate about
14 innovation, I really see the advent of blockchain and NFTs as being
15 as transformative in our daily life and our economy as the internet
16 was. I mean it, to me, I really feel like it's in the blockchain
17 and NFTs are in their infancy.

18 And, you know, from my background, I started off as a web-
19 based programmer, a Java programmer in the 90s. And I grew up
20 witnessing and contributing to the evolution of the internet from
21 being a web-based sort of message board, early, like Usenet or just
22 mostly file transfer-oriented environment, to the rich media
23 interactive experience that we have today, that we get to
24 experience. And there's been a ton of intellectual property around
25 the internet as it's evolved over the several last decades.

26 And I see the evolution of blockchain and NFTs on a similar
27 path. The internet is what we call Web2, and the blockchain is
28 Web3. And like the early internet in the 90s, the blockchain Web3,
29 it's not a media rich experience. Right now, it's very text based.
30 It's a transactional record.

1 The blockchain Web3 solves so many technical problems already
2 that we have on the internet. It provides transparency and clear
3 chain of title, of ownership of physical and electronic assets.

4 And with the innovation of NFTs, I really see the potential
5 for Web3 to be infinite because NFTs can represent any real world
6 or electronic asset or be a tool. And NFTs can control those assets
7 and they can act as their own software interface through smart
8 contracts to control that asset, and the potential is enormous.

9 So I think it's important to allow the blockchain and NFTs to
10 develop organically, to its potential and not to impede
11 technological progress with excessive regulation. It will only
12 cause development and investment in the technology in this space to
13 move offshore, as we've already seen. And this would be undesirable
14 for the United States. We should be leaders and the innovators in
15 this space and embrace the technology and make it a haven, in my
16 view.

17 With the downfall of FTX, obviously there was lots of concerns
18 about crypto. But FTX, in my view, it wasn't a technology problem.
19 I mean, it was a malfeasance problem. And I would say also, in
20 part, it's a result of the United States not embracing crypto and
21 blockchain and providing the proper infrastructure and regulations
22 for it here. And instead it causes companies to move offshore and
23 set up abroad and where we don't have as much control as we would
24 have over here. So ultimately, I think it's paramount for the
25 United States to be the leader in the global economy and innovation
26 for blockchain, crypto, for NFTs. And we should embrace it and be
27 at the forefront of this technology, regulate the crypto space, but
28 do it thoughtfully and exercise caution in ensuring that investment
29 and innovation won't be chilled or that we're not going to impede
30 investment in innovation because of overregulation.

1 So, as an example, the internet, it benefited hugely from a
2 laissez faire approach from the U.S. government for decades. And
3 while I believe that crypto should be regulated, there's so much
4 more to the blockchain and with NFTs than crypto. I mean, crypto is
5 just a very small portion of blockchain technology. And I think
6 blockchain and NFT should enjoy a more laissez faire approach.

7 We should take this opportunity to develop, lead the world in
8 this space, encourage standards to help improve security and
9 efficiency. And we need a delicate balance between regulation and
10 kind of a laissez faire approach.

11 With respect to patentability, NFTs and the blockchain have so
12 much potential to solve so many technical problems. And I see these
13 technologies as being pretty robust for our strict 101 standards,
14 as long as they are solving a technical problem and providing a
15 technical solution. I think that the PTO has been appropriate in
16 granting patents and not being overly strict in this space. So I'm
17 grateful for that.

18 And there's so much innovation to be had in the space. Just
19 today, I just saw that the Blockchain Bandit had attacked a bunch
20 of bitcoin wallets and siphoned off tons of crypto money.

21 Wallets, for example. We need better technology, maybe
22 hardware-based wallets. There's so much innovation there to be had.
23 And I'm fortunate enough to have amazing clients. I've been working
24 in this space since 2013, was one of my first clients in
25 blockchain, and I did even a TEDx Talk in 2016 on the blockchain
26 revolution. And so I've been in this space for a long time, and I
27 have amazing clients that have great technology and I feel like-- I
28 hope that, I know there's a lot of congressional committees that
29 are looking at everything very closely, but it's important to have
30 industry leaders in this space.

1 As an example, one of my clients, Forte, which is a gaming
2 blockchain client, they're not just gaming, they're providing like
3 a huge infrastructure around blockchain technology and creating
4 standards and security.

5 And this is what we need. We really need strong leaders in
6 this space to help build our infrastructure and create really
7 robust and secure systems so that we could make the next generation
8 of this technology.

9 Ironically, when we're going back to sort of the 101 issues of
10 patentability, I think of the innovation, the genesis of
11 blockchain, which is from the Bitcoin white paper, and I look back
12 at that and I wonder, what if Nakamoto, he may not even be a real
13 person, so there might be an inventorship issue there, but what if
14 he had filed or they had filed for patentability on that? Would the
15 Patent Office have granted a patent on it? Because really, the
16 blockchain is a fusion of many old types of technologies to create
17 something new. And I think that it would have been potentially
18 patentable. The combination of peer-to-peer architecture, hash
19 encryption, a consensus algorithm to provide this new
20 transformative structure that creates a chain of ownership for
21 electronic assets. I think that there would have been the potential
22 there.

23 So I'm grateful that this concept of the blockchain wasn't
24 patented, because we do-- it has definitely, it was clutch for this
25 whole new economy that is being developed around it. But there
26 could have been an opportunity there to patent.

27 And I think ultimately, blockchain and NFT innovations are so
28 ripe for patentability because it's just so early. They're in their
29 infancy, and they could provide so many technical contributions.
30 And I really am grateful that the Patent Office is recognizing
31 their value and granting patents in this space and I'm happy that

1 we've got a lot of great companies out there working to develop in
2 this space.

3 But I would also encourage that our whole government would
4 also embrace the technology so that we can have more organic and
5 companies investing more here in our country to put us at the
6 forefront of this space. And so that's my thoughts, but thank you
7 so much.

8 <DAVID GERK> Thank you, Ms. Fessenden. And thank you to all
9 the speakers, have done a wonderful job speaking about finding
10 correct, good balance of regulation. In self-regulating, everyone's
11 done a great job on sticking to 10 minutes. So thank you, let's
12 keep that up. Our next speaker is Mark Stignani. We look forward to
13 your remarks. Thank you.

14 <MARK STIGNANI> Thank you. I appreciate the opportunity to
15 speak and thank you both to Undersecretary Vidal and the USPTO of
16 providing this forum.

17 My comments are going to be largely around the tracking
18 mechanism that NFT provides versus whether it's an IP asset type or
19 not. One of the things that I should say about myself is that I
20 have been working in emerging legal tech for over 25 years. I
21 predate the internet, have worked on ARPANET in the 80s. I
22 practice, not just patent law, but digital data security, privacy,
23 as well as other aspects of corporate law that surrounds the use of
24 crypto as well as NFTs.

25 I come from a long background of content of 16 years in-house
26 at companies like Westlaw and Derwent. I speak monthly on
27 cryptocurrencies. I also co-chair the Practice Innovation Committee
28 for Emerging Technology at AIPLA. So I represent the old guys' view
29 on NFTs as we come forward here.

30 So the key initiatives here is, I look at NFTs, in many cases,
31 I see a solution in search of a problem. And so one of the things

1 that I think about NFTs is they're a unique opportunity to present
2 something as a link on a ledger.

3 The blockchain, I think, is well formed, and it has a good
4 basis to it. I think that the whole focus on the anonymity of
5 blockchain is probably not something we need to focus on for the
6 USPTO. I think the USPTO would be kind of the official granter and
7 holder of U.S. patents. It certainly should present itself much
8 more like a central bank digital currency provider, rather than a
9 facilitator of anonymous networks transferring patents here and
10 there.

11 So I think one of the things that I would really encourage us
12 to consider in bringing NFTs into the Patent and Trademark Offices
13 remit is that the NFT as it is right now is really so undefined
14 really as an asset type, that it's just a token that's attached to
15 something real in the World Wide Web or in the in the metaworld. It
16 confers almost no IP rights, unless the smart contract - which is
17 its own misnomer - does so, so there is no predictability.

18 So the key considerations I would urge the USPTO to engage
19 with the blockchain and with the NFTs is to be a source of trust
20 and predictability as to whether you're a broker, whether you are
21 the facilitator of a blockchain that helps NFTs engage with
22 patents, whether they're transferring a patent right, conferring an
23 assignment, conferring an inventor, that an inventor has agreed to
24 assign their rights.

25 I think fundamentally the best and highest use of NFT and
26 blockchain use at USPTO is really for to use it as a facilitation
27 tool, to increase the speed, security, predictability of each
28 matter that the USPTO brings in, and works through, and grants.

29 As you were the holder of record for literally all the
30 intellectual property registration rights, but for domains and
31 copyrights, I think you have a very powerful position to hold as a

1 trusted resource to engage with blockchain, to engage with the
2 various transactions around patents. And rather than-- I'm worried
3 less about the USPTO being the obstructor to these types of
4 transactions, but the registrar of these transactions, so that we
5 have one place.

6 In 16 years of acquiring companies as an in-house company and
7 another 12 working at Barnes & Thornburg and other law firms, one
8 of the biggest problems I see is locating the chain of title,
9 locating the chain of custody that is around a certain patent asset
10 or an SIRO. Often I find orphans that have been kind of left behind
11 as companies have merged and collapsed. So you end up with a great
12 deal of assets that are just being unused or being unfounded in
13 many cases.

14 So one of the things that I think blockchains and smart
15 contracts could be used for is especially the transfer,
16 registration, and holding of the patents. I think that this could
17 start at the inventor state, where the inventors actually validate
18 the USPTO. Rather than signing an assignment that they register,
19 their assignment of rights in the blockchain at that point in time.

20 This would also be available early on to validate whether or
21 not the company has adequately assigned rights. I think that the
22 registration recordation of all entities that own patents would be
23 a valid use of blockchain for the USPTO as well.

24 The whole aspect of validation, I think, is right clearly in
25 the middle of the remit of USPTO for any asset class they hold
26 onto. I think that also the registration liens and security
27 interests, things like FRAND royalties or availability for standard
28 essential patent status, are also things that could be recorded on
29 the blockchain in the Patent Office rather than forcing us to go
30 out to different other standards organizations to discover all the

1 things touching on a patent. Same thing goes for litigations or
2 IPRs.

3 So one of the things I think that blockchain would offer in
4 high advantage for the USPTO is the ability to do transactions
5 without engaging simple human process, the process that
6 [inaudible].

7 So the automation I think the blockchain offers for USPTO is
8 there. I think, as we get further and further into smart contracts
9 again. I'm somewhat scoffing at smart contracts as being a FORTAN
10 statement that I learned in 1980, 1973 actually, 1977, excuse me.

11 You also will have the ability to then automatically transact
12 patents and licenses and such like that. The NFTs remind me
13 somewhat of the Digital Object Identifier work that was done at the
14 Copyright Office in 2000. I mean, it's a good idea. It just lacks
15 execution at this point.

16 So one of the things that I would urge the USPTO to consider
17 doing is being a trusted anchor point for all the patents, design
18 patents, SIRs, anything else that it holds - trademarks - that it
19 holds within its official authority as being the holder of both the
20 proof of ownership, the actual affirmation of grant rights
21 transfers, as well as engaging with that as a mechanism.

22 Having been involved in the Patent Center through AIPLA, I
23 would urge an incremental adoption of these things rather than a
24 wholesale thing to the USPTO. I think that there is imminent
25 blockchain engagement opportunities with the current systems you
26 have to make them better and more reliable and more predictable.

27 And I will close off my commentary here, is that the NFTs, I
28 think, are much more hyped than practical at the point. They are
29 still an ESG drag.

30 If the USPTO is going to engage NFTs, I would urge you not to
31 go down the proof of work pathway. Minting a single NFT still

1 causes your refrigerator to run for a week, if that's the last
2 calculation of that.

3 So being that you are the official entity, I don't think you
4 would have to be-- go through that whole proof of transaction
5 aspect. It simply would have to be go through the proof of stake,
6 where the USPTO affirms a transaction that happens between two
7 parties.

8 I do think that the USPTO should require full identity of
9 patent ownership. We see too many patent transactions that are not
10 visible to the public, and when they get into litigation, there is
11 a long and expensive route to validate that chain of title.

12 So with that, I will close my remarks and appreciate the time
13 and opportunity to speak.

14 <DAVID GERK> Thank you very much, Mr. Stignani. Our next
15 speaker is David Hardoon.

16 <DAVID HARDOON> Hello. Thank you Undersecretary Vidal and the
17 organizers of the event. I think this is an incredible opportunity
18 to discuss and to kind of gain some understanding of this new
19 technology.

20 So I have a computer science background, and I'm a practicing
21 patent attorney, and I work with innovation every day and in a
22 position where I counsel clients regarding their blockchain
23 technology, the use of technology, and I get to needle inventors
24 about whether that technology makes sense to implement here, and
25 really try and understand why they're using this technology over
26 others.

27 So one of the things that I ask inventors when they bring
28 blockchain technology to me is, how is this use of the blockchain,
29 how is this improvement better than, for example, just storing data
30 in a database that we've known about for decades? Is there a real
31 use for this, or is this something that's merely buzzwords, or the

1 use of technology in order to get investors in the space? And I've
2 cautioned inventors that sometimes the use of their technology
3 doesn't make sense, and so we should possibly include more legacy
4 technologies alongside their other innovations when it comes to
5 protecting their improvements.

6 That said, on the patentable subject matter front, I try to
7 counsel clients about the distinction between improving blockchain
8 technology, improving NFT technology, and merely applying that
9 technology. For example, if they are improving the process of
10 authentication or changing and improving protocols for mining
11 blocks, for example, an alternative to proof of work or proof of
12 stake, if they're reducing the cost of storage on the blockchain or
13 reducing the time that it takes to process transactions in a way
14 that doesn't harm the underlying blockchain, those are-- or
15 improving protocols for the creation of NFTs and their linkage to
16 the use of external storage. I think where you're improving the
17 functioning of those technologies - and I think there's a ton of
18 innovation in that space - I think under patentable subject matter,
19 those things are pretty clearly patentable.

20 Where companies come to me and they're merely leveraging
21 existing technology and using it just because they created a new
22 coin or have an idea for a new way to use this technology, it
23 doesn't necessarily make sense to file a patent because their
24 leveraging of that technology just might not provide enough
25 material for it to be considered patentable subject matter. So I
26 deal with that all the time and sometimes I, as patent attorney,
27 have to be the bad guy, or at least kind of a gatekeeper in some
28 ways for what my clients can or shouldn't file for.

29 Some of the assets that my firm is working on currently are a
30 protocol for documenting a chain of title for hemp production and
31 sales. Tying real-world assets to commodities, for example, is

1 really interesting. And allowing multiple parties, including
2 multiple government entities, law enforcement, to access data that
3 ensures that a person or party is legally able to possess that
4 commodity and you can tie that commodity to that person is really
5 interesting.

6 I've also worked with tying NFTs to real-world collectibles
7 and the ability for folks to tie a real, hard asset to a digital
8 one, and so that linkage allows the transfer of that asset and for
9 verification and authentication of that asset to third parties.

10 I filed patent applications to improve blockchain technology,
11 the use of NFTs, and improved protocols for the authentication of
12 location, of people, and the creation of digital prizes for people
13 who are in a particular space.

14 I think there's incredible advancement in the space and I'm
15 really excited to hear about the innovation that solo innovators
16 and technology teams and startups are coming out with, and it's a
17 real joy to be able to discuss the technology that they're so
18 excited about with them.

19 In the future, I think that there's a great deal of potential
20 to use smart contracts to effectuate the enforcement of contractual
21 terms and the licensing of IP. Professor Lawrence Lessig and the
22 book "Code" opened my eyes to the possibility of underlying code as
23 an enforcement mechanism for contracts and licenses.

24 The ability of NFTs to bind downstream parties is exciting
25 from both a technical and a legal perspective, and the inclusion of
26 automated payment mechanisms as a possibility to lower costs and
27 the barriers for entering into contracts and licenses.

28 Additionally, when purchasing digital assets, it's important
29 to understand that the asset is vulnerable to attack or fraud. For
30 example, storage on the blockchain is incredibly expensive, and as
31 a result, the payload of many NFTs are stored off-chain. Depending

1 on how and where the assets are stored, they may be vulnerable to
2 attacks, where different text or images are substituted for what
3 the purchaser thought that they were getting.

4 Today, when counseling clients, I try to explain those risks
5 involved, including whether courts would interpret smart contracts
6 as a contract downstream, and third-party issues regarding binding
7 purchasers and repurchasers of digital assets. And I try to explain
8 that this comes up fundamentally when things are not working.
9 Because courts don't involve themselves in enforcement of contracts
10 when everything is going according to plan.

11 So when things break down and you see unexpected behavior,
12 what happens and what are the rights of the parties in this case?
13 Whether that is a third-party oracle that pushes data to the
14 blockchain to provide a source of truth, that interacts and
15 triggers smart contracts, or the functioning of the blockchain
16 network itself, or a bug is found in smart contract code, or
17 exploited, or bugs exploited by a third party or the NFT owner
18 themselves

19 Outside of the code of the blockchain, what mechanisms are
20 there for recovering property when something breaks? It's important
21 to understand what you are purchasing and selling when you are
22 dealing in NFTs and digital assets, particularly when those digital
23 assets are tied to intellectual property.

24 Lots of stories in the news about parties buying up NFTs with
25 the assumption that they're now able to make copies of a work just
26 because they own the official NFT to that work. Most folks with a
27 legal background, attorneys and scholars, would say no. At best,
28 they have a limited license to use or view that work, and they
29 don't have broad sweeping rights to make copies of the work.

30 When linking code to underlying legal rights and obligations,
31 there needs to be human-readable and understandable terms that

1 could be interpreted by courts and by parties, because sometimes
2 the code does not speak for itself, particularly when things break
3 down.

4 If there's a bug in the code, it's hard to understand exactly
5 what the intentions of the parties were. And, as it stands, I am a
6 bit skittish in recommending the use of smart contracts for broad
7 sweeping regimes other than basic transfers of digital assets, as I
8 don't think that linkage is there yet.

9 Do I think that the official system of assigning IP should be
10 in the blockchain? At this point, I don't think it makes sense, but
11 I do think that we shouldn't necessarily hamper the ability of
12 people to grant licenses and sublicenses using digital tokens, and
13 I think that's worth experimenting with.

14 So overall, I think there's a lot of positives with respect to
15 NFT technology, and I'd like to see where that technology develops.
16 Thank you.

17 <DAVID GERK> Thank you very much, Mr. Haroon, today. Our next
18 speaker is Ryan Chowdhury.

19 <RYAN CHOWDHURY> Hi, everyone. Thank you to the Patent Office
20 for initiating the study, the participants for sharing their
21 perspectives, and to everyone for your time and attention to topics
22 relating to emerging technology.

23 So a bit of background about myself before I give some
24 comments. I'm an associate at the Washington, D.C. office of Fish &
25 Richardson. I've been practicing IP law about eight years now, and
26 my practice spans across all aspects of patent law, including
27 patent prosecution, post-grant matters before the Patent Trial and
28 Appeal Board - or PTAB - and some district court litigation as
29 well. I also have experience counseling clients on blockchain and
30 cryptocurrency-related patent applications. And more recently, I've
31 also had the privilege to be member and participant of several Web3

1 communities. So I've seen how builders are approaching NFTs from an
2 industry standpoint.

3 And so my comments today will be fairly high level, and will
4 focus on the intersection of NFTs and emerging Web3 systems and how
5 patent policies can fit within such systems. As I give the
6 comments, I think the policy question that I want everyone here to
7 ask yourself is, how should patent rights fit within the context of
8 decentralized Web3 systems? And I bring that up as-- because as a
9 patent attorney that was getting into these Web3 communities, what
10 I noticed is a tension between exclusive rights granted by patents
11 and the ethos of Web3 to promote decentralization.

12 So, to start, I'd like to give a little bit of context of how
13 I understand an NFT. I think another panelist had mentioned that if
14 you ask the definition of an NFT, you'll get several different
15 definitions and I think that's particularly true given how broad an
16 NFT can be understood to represent depending on the context.

17 And so the context that I'll be talking about today is the
18 definition of an NFT within the context of Web3. The way I
19 understand it is a permissionless representation of ownership of
20 metadata that can be tracked, sold, and monetized. I use the word
21 permissionless because any user can create or mint an NFT on a
22 public blockchain, such as Ethereum, without explicit authorization
23 by another entity. And that's very powerful because you can
24 essentially mint whatever NFT you want without someone else telling
25 you whether it's okay to do that or not. And so with power and
26 technology also comes risks, and that's what some of the other
27 panelists today have focused on.

28 In terms of the NFT that's minted on the blockchain-- the
29 blockchain chain serves as a distributed ledger that publicly
30 stores ownership data. The metadata that is defined by an NFT can
31 be associated with an underlying asset, such as a digital asset,

1 like an image file. There is also interest that's developing in
2 associating the metadata with real-world assets or assets that
3 exist off-chain in the real world.

4 And so with this context, an NFT should really be understood
5 as the foundation of Web3. And one of the ways in which a lot of
6 Web3 communities are using NFTs is a way of enabling participation.
7 So an NFT or ownership of an NFT gives you participatory rights in
8 a Web3 community.

9 In terms of how Web3 communities are being organized online on
10 the internet today, what I've seen is a lot of Web3 ecosystems use
11 a decentralized governance model. And this decentralized governance
12 model also applies to the technology stack that's used by a lot of
13 blockchain products.

14 I'll share my screen here to give you kind of an overview of
15 the decentralized governance model from a high level. These are the
16 components of a decentralized governance model that's typically
17 used in a Web3 community. At the lowest level, you have a
18 blockchain network, which provides an open distributed ledger or
19 database system, and this means that the data is contained within
20 the blockchain, it's distributed or duplicated across computers,
21 and therefore it's sufficiently decentralized.

22 On top of the blockchain, you have a composable smart contract
23 protocol. The protocol is essentially executable code that's stored
24 on a blockchain and is automatically executed when predetermined
25 terms and conditions are met.

26 And above that, you have a client or it's sometimes referred
27 to as a decentralized or distributed client or a dApp. And it's--
28 in the Web2 world, it's similar to a mobile app or a web app. It's
29 essentially a software program that operates on a peer-to-peer
30 network of computers running on a blockchain platform, providing a
31 variety of functions.

1 And so when you think of the decentralized governance model,
2 the question that I've asked myself, and the question that I invite
3 everyone that's attending this study to ask themselves, is where do
4 patent rights fit within this decentralized governance model?

5 One of the things that I will say is a key ethos of Web3 is
6 that the blockchain networks and the smart contract protocols need
7 to be open source for the systems to be sufficiently decentralized.

8 And so you see a big focus on blockchain, and this is thought
9 to be an imperative for both the purposes of security, as well as
10 fostering decentralized economies of such systems. Transparency
11 associated with open-source technology means that anyone is free to
12 use the technology at the blockchain level as well as the protocol
13 level. And so that really creates opportunities for the Patent
14 Office to think about where patent rights and exclusive rights
15 granted by patents fit into this decentralized governance model.

16 Turning to some policy challenges and issues-- as a high
17 level, patent policy should not disrupt or be intention with these
18 key ethos of web3 seeking decentralization. Rather, my view is that
19 the patent laws and regulations that incentivize participants to
20 seek exclusive rights to grow and expand web3.

21 And so one of the ways that I've conceptualized that is to
22 think about where patent rights fit within the technology stack.
23 And so when it comes to the blockchain network and the contract
24 protocols, they're intended to provide permissionless, trustless,
25 and verifiable ecosystem in which value can be transferred and upon
26 which web3 products and services can be built. The technology is
27 supposed to be or it's intended to be available to the public. I
28 essentially see them as public goods. They are the core innovations
29 of programmable blockchains and where we expect value to accrue in
30 the long term. And so, in my view, exclusivity or exclusive patent

1 rights at these layers of the stack potentially could stifle
2 innovation.

3 However, if you get to the client or the decentralized or
4 distributed application layer, I think this is where a lot of
5 interest in exclusive rights should focus. And that's because at
6 this layer, the applications provide functionality. And a lot of
7 companies that are innovating in this space have developed a lot of
8 proprietary intellectual property that's built upon the open-source
9 standards at the protocol and network layer.

10 The applications also enable products and services to be
11 deployed and run without a central party to operate them. They open
12 a vast world of possibilities, including community-empowered
13 applications that need not rely on algorithmically-driven ad
14 programs to make them economically viable. And that's a very big
15 focus of web3 at the current moment. They also incentivize creators
16 to innovate, and if creators have IP or exclusive rights at the
17 application layer, they're incentivized to innovate further.

18 And so, turning next to NFT-related inventions, from my
19 perspective, what seems less important for patent protection are
20 open-source token standards on a blockchain, such as the ERC-721 or
21 the ERC-1155 standards on the Ethereum network.

22 Another challenge - and other panelists have focused on this -
23 is patent eligibility issues related to NFT-related inventions. I
24 think, as a matter of policy, the eligibility regulations should
25 restrict abstract processes that use NFTs in a manner that preempts
26 the traditional business process. So this is similar to our
27 existing patent eligibility jurisprudence, as well as protocols and
28 processes that are the focus of blockchain development entities,
29 such as the Ethereum Improvement Protocols or EIPs.

1 I also see less of a focus for patent protection in the
2 blockchain protocols, which, as I mentioned before, I think should
3 represent public goods for web3 communities and projects.

4 So then that brings us to the next question, which is, what
5 type of NFT-related inventions should be prioritized or the focus
6 of patent protection? The way I see it, methods and systems that
7 interact with blockchains and allow NFTs to be created, traded,
8 managed in new ways are areas that create opportunities for patent
9 protection.

10 So some examples of this are new ways of transacting with
11 NFTs, account abstraction techniques to create privacy layers for
12 public NFT metadata that's accessible on a blockchain, data
13 verification techniques using NFT metadata, data structures for
14 associating NFT on-chain metadata with off-chain data, transaction
15 protocols for processing and validation methods for using the NFTs.

16 <DAVID GERK> Sorry, Mr. Chowdhury, we're really running over
17 time here, so we're going to have to move on to the next speaker.

18 <RYAN CHOWDURY> Great. Thank you so much, and I'll end my
19 comments here. Appreciate it.

20 <DAVID GERK> Our next speaker is Michael Kasdan.

21 <MICHAEL KASDAN> Thanks everyone. My name is Michael Kasdan.
22 I'm an IP partner at Wiggin and Dana in their New York office. I'm
23 also the Co-Chair of our Blockchain & Digital Assets group, and I
24 work with an array of clients across different industries in this
25 Web3 space that we've been discussing. I'm also an adjunct
26 professor at NYU School of Law, where I teach a course that started
27 as a patent licensing course and has expanded to IP licensing,
28 including starting to talk about some of the monetization
29 techniques for NFTs. I also guest lecture at NYU Startup School on
30 IP for entrepreneurs, as well as on NFTs and blockchain and the
31 metaverse. I'm also co-chairing the New York chapter of the

1 Licensing Executives Society, and I am the Chapter Head for the New
2 York Chapter of the International IP Commercialization Council. My
3 practice for 20 years has included and focused on IP litigation and
4 IP licensing, as well as advising emerging technology companies on
5 IP strategy.

6 I came to blockchain as somewhat of a skeptic after hearing a
7 lot about cryptocurrency for years, but learned about the space
8 over the past number of years, basically from clients who had
9 really innovative, interesting ideas in some of the use cases that
10 I'm going to talk about.

11 So clients in the patent space, clients who want to do
12 interesting licensing and monetization. And it's been an
13 interesting time, with a lot of learning and writing and thinking
14 about this space, and I'm really pleased to be among this group and
15 to listen to some of the comments from the other speakers.

16 Before I commence my remarks, I also wanted to thank
17 Undersecretary Vidal and the Offices for the opportunity to share
18 these thoughts this morning, especially I wanted to commend the
19 USPTO and the Copyright Office on this joint initiative to gather
20 information about NFTs and IP. I think it's really important.

21 Turning to my comments, I wanted to direct my comments on
22 three areas. And the first area I wanted to focus on was just to
23 share a bit about the breadth of non-fungible tokens in terms of
24 use cases, in terms of industry verticals and folks using this
25 technology in different industries, also in the way they can
26 flexibly treat IP rights.

27 And I'm going to attempt to fade here and see if I can throw
28 up a slide on this. Here we go. So hopefully folks can see that
29 slide.

30 <DAVID GERK> We can.

31 <MICHAEL KASAN> Great. Thank you.

1 But the place I want to start is with the use cases. I think
2 NFTs came into a lot of popularity, a lot of public conversation,
3 into the mainstream, with a lot of focus on the digital art and
4 digital collectible space, which I think is a really interesting
5 space.

6 But the use cases are far broader than that. And I think as
7 Undersecretary Vidal talked about, she was recently traveling in
8 Asia and talked about the many different industries that are
9 interested in and in fact implementing using NFTs.

10 And I had the same experience. A lot of folks want to talk
11 about this across different industries. And I think starting with a
12 place-- that's kind of the definition, we talk about fungible
13 tokens, right? Fungible tokens are like fiat currency. You can
14 exchange one for one. Non-fungible tokens is anything else that can
15 be tokenized and is unique. And that's a very, very broad asset
16 class.

17 And I'm not going to spend a lot of time in this slide, but
18 it's intended to give some color as to the array of use cases being
19 used across different industries.

20 So certainly we have the digital art and digital collectibles.
21 NFT use cases also extend to linking digital online products to
22 real-world products. Also things like tickets and access badges,
23 token-gated communities, events.

24 Another use case that's a little bit less in the news - but
25 others have mentioned today - are tracking real-world assets or
26 even intangible assets like IP. So in the real estate industry, we
27 think about title and what a mess that is and how inefficient it
28 is. So the ability to digitally track, authenticate, something like
29 provenance and title.

30 Tokenizing real-world assets is another use case, as is the
31 sort of digital video game metaverse space, where we're spending

1 more time in digital spaces - like this one - and we may have
2 avatars or gear or other digital assets that we own.

3 So I just wanted to start there just because I think it speaks
4 the breadth of use cases, I think speaks to the breadth of the
5 topic, and the complexity of it.

6 And I also just wanted to throw up this slide in terms of some
7 of the benefits of blockchain that folks focus on. And two of them
8 I wanted to highlight that I think are particularly relevant. One,
9 why are we excited as IP folks about this topic? We're creating
10 more and more digital stuff every day. We're spending more time in
11 digital spaces, and NFTs provide a vehicle to monetize digital
12 assets that were previously hard to monetize. And so the ability to
13 have a certificate that provides authenticity, scarcity, and
14 provenance allows you to monetize all manner of different types of
15 assets.

16 The second benefit that I wanted to mention that I think is
17 really relevant to us speaking about innovation here and that
18 others have mentioned is this ethos, I think in this potential
19 democratizing effect and sort of the change and the transition from
20 web2 where the sort of pipes companies are taking the lion's shares
21 of the profits and control, and you need to go through a middleman
22 to reach markets. The ability to be able to tokenize things, store
23 it on this immutable ledger. It places a lot of power back in the
24 hands of artists and creators and innovators and inventors and
25 gives them the ability to more directly reach markets and profit on
26 their inventions. I think that's really exciting. So I'm going to
27 stop sharing, and go back.

28 So, for example, in the digital collectibles space, the other
29 I think, important thing to highlight is that there's also a great
30 diversity of the way IP rights flow with NFTs. So for digital
31 collectibles, for example, like some of the profile pictures that

1 were initially popular and still are, oftentimes those can convey
2 no IP rights at all. You buy it, you can display it, like if you
3 were to buy a t-shirt, you can wear it, you can display it
4 digitally, but you can't commercialize it.

5 NFTs also, in other use cases, have the ability to convey all
6 sorts of IP rights, full commercialization rights. So examples like
7 Bored Apes Yacht Club or Gutter Cat Gang or some of those profile
8 pic projects that are commercially valuable, give the holder of the
9 NFT the ability to commercialize it, to make a new movie, to
10 license that to a brand. And I think that's really exciting.

11 We also have NFTs where the NFT includes patent ownership
12 rights or license rights. So some entities in the decentralized
13 science - or DeSci - space have created IP NFTs. And there are news
14 reports - or were news reports - of some companies working on
15 tokenizing IP for transferring and handling IP, licensing of
16 patents, and also selling NFTs on marketplaces, like NFTs that
17 convey patent rights.

18 So folks are excited about this. I think there's a lot of
19 potential there in terms of unlocking value, bringing new liquidity
20 to the asset class, and folks are excited about that. And I think
21 it is worth being excited about.

22 I think it also-- this flexibility and this breadth, also
23 illustrates that transparency and clarity, in terms of what a
24 particular NFT is and what IP rights it includes or doesn't
25 include, is a really, really important issue. And it's important
26 for stakeholders and policymakers to work towards creating
27 standards that really provide that in the marketplace.

28 I think it also underscores how important it is to ensure
29 authenticity. I said ideally they provide authenticity, and as
30 others have mentioned - as some of the written comments submitted
31 to the Office mentioned - authenticity can only be guaranteed at

1 the source. I think that provides an opportunity for folks to lead
2 in this area, including the Patent Office.

3 The second area that I want to briefly comment on - and which
4 others have touched on - is blockchain and NFT-related patents and
5 patent quality. I think when I first came to this space, it was an
6 interesting experience as a lawyer, because two things that you
7 hear are things like, this is web3 and patent and copyright and
8 trademark law -- that's web2 law, and we're past that. That's not
9 relevant anymore. The other thing you hear, which I do understand
10 but push back against gently, is we're going to put everything in
11 smart contracts and we don't need lawyers anymore.

12 I think the reality is that while these new technologies do
13 pose challenges, there's no such thing as web3 law. There's just a
14 law, including patent law. And just like we're seeing increased
15 trademark filings in the NFT space and copyright filings for these
16 assets, we're also seeing patent filings.

17 And I just wanted to emphasize before my time is up that, as
18 others have mentioned, I think it's very important and there is a
19 lot of innovation and need to grant patents on novel and nonobvious
20 inventions. And I think, as with any emerging technologies, I just
21 want to emphasize to the Office that it's important to train in
22 this area so that we're awarding patents of the proper scope.

23 <DAVID GERK> Thank you Mr. Kasdan for your remarks.

24 <MICHAEL KASDAN> I think I'm at my time, and I'll submit the
25 rest in writing and appreciate the opportunity.

26 <DAVID GERK> Thank you. Ten minutes goes fast, for sure. Our
27 next speaker is Dov Greenbaum.

28 <DOV GREENBAUM> Okay, so I'm just going to quickly share a
29 slide. Hopefully you guys can see that.

30 <DAVID GERK> Yes. We can see it.

1 <DOV GREENBAUM> I want to thank the Patent Office and everyone
2 involved for allowing me to speak today. It's an honor to be on
3 this great list of practitioners who are involved, and getting to
4 see what everyone's been saying. Clearly, as the eighth person on
5 this list, a lot that I planned on saying probably will have been
6 said already, or has been said already. So I'll try to be as brief
7 as possible, and I'll try to be as novel as possible.

8 I'm also a bit different. As you can see, I'm more of an
9 academic than a practitioner. My background is in genetics and
10 bioinformatics. I'm an attorney licensed in California and to the
11 USPTO. I was formerly a litigator in biopharmaceuticals, more
12 recently a patent prosecutor in the areas of software, robotics,
13 and missile defense. And currently I am also-- I'm a researcher in
14 molecular biophysics and biochemistry at Yale, and also I'm a law
15 professor at Reichman University in Herzliya in Israel, where I'm
16 also director of the Zvi Meitar Institute for Legal Implications of
17 Emerging Technologies. We're very much involved in this sort of
18 space. We do a lot of stuff with meta. We've run conferences in the
19 area of metaverse and smart contracts and NFTs. I have a doctoral
20 student who is in the area of smart contracts. I've run a course -
21 a lot of fun - entitled The Law of the Metaverse in the Metaverse,
22 where actually the students are actually in the metaverse for the
23 entirety of the course. A lot of them throw up at the end, but
24 that's for better or for worse.

25 Like speakers before me, I'll try and be high level. I will
26 assume basic understanding of NFTs and patent law and everything
27 like that. So without further ado, I'll just quickly run through
28 this. Hopefully it's changed.

29 So I just want to touch on a whole bunch of topics-- the
30 intersection between NFTs and patents. One is the development of an
31 ownership/assignee database, with using NFTs to sort of track

1 ownership of patents. Other sorts of blockchain-associated tools.
2 In the area of NFTs and patents, the idea of tokenization of patent
3 ownership. I'll touch a little bit on issues relating to selling
4 NFTs of inventions, some issues with regard to patent sale and
5 licensing via NFTs, and I'll just finish with some issues on design
6 patents.

7 So really quickly, I don't know if anyone's seen this, but
8 IPwe and Casper Labs, and at some point also IBM was involved in
9 this, announced last week that they were converting 25 million
10 patents to NFTs. I sort of assume in an effort to develop an
11 ownership-like database, and like many have said before me already,
12 there's a lot of value to stuff like this. So the NFTs are easily
13 transferable. They're immutably and transparently recorded within
14 whatever blockchain they're using. I think it's a proprietary
15 blockchain by IPwe, so it's going to be a permissioned, private
16 blockchain, with all the positives and negatives that come with
17 that.

18 One of the good things is, I think that - and practitioners
19 will note this - that the assignments will be timely recorded,
20 which is great. Oftentimes assignments aren't timely recorded for
21 whatever practical reasons. More so prior to 2015, when there was a
22 fee, there was more reasons, but now less reasons.

23 Some have already mentioned that NFTs on the blockchain will
24 provide a clear chain of custody of who owns what. In terms of
25 patents, it's another issue with the assignee database, and
26 sometimes some people within the chain of custody don't necessarily
27 put their information into the database. And hopefully also this
28 will also require licensing of NFTs representing the patents.

29 On the downside of this of course, is will such a system be
30 redundant with the USPTO's already database? And if it is
31 redundant, will assignments in the system be acknowledged by the

1 USPTO in courts? Will we have issues like 261 failure to record? If
2 you only record within the NFT sort of system and not within the
3 USPTO system, will that be considered a failure to record? Of
4 course, I don't know how they end up - or will end up - setting up
5 this particular blockchain, but of course there will be issues with
6 the anonymity or the pseudonymity of the recording, and perhaps the
7 need for persistent identifiers, such that we can actually follow
8 the chain of custody. So that relates to using NFTs in terms of
9 ownership and an ownership database.

10 Moving along, thinking about other tools once you have
11 developed an NFT database that tracks patent ownership, you can
12 imagine a whole host of tools that will be relevant and useful for
13 patent owners, practitioners, licensors, litigants, and even
14 researchers. Hopefully at one point-- again, they announced that
15 they were going to do 25 million. I assume that's more than what's
16 going on in the USPTO. And so you would assume that they're working
17 on multiple sort of patent offices. And so there would be some
18 interest in seeing whether or not that would create more
19 interoperability between a data held in various patent offices.

20 Again, being that it's on the blockchain and being that
21 they're NFTs, and being that they're relatively standardized -
22 depending on what NFT standard you use - hopefully they'll be very
23 transparent, which will make research on these apps, on these
24 datasets, easy, decentralized datasets. So if anything ever
25 happens, of course there'll be access to the data.

26 And I think what was just mentioned before me is, of course,
27 one of the concerns is that we all assume - or some assume - that
28 when something goes up on the blockchain, that assumes that that
29 information is reliable and truthful, but in reality, it's only
30 immutable. Anyone can put whatever information they want up on any-
31 well, I'm speaking too broadly, but information can be put up on a

1 blockchain that isn't necessarily truthful or reliable, and yet it
2 might be immutable. And so the question is, how do we assess
3 reliability of the information that's put up on these sorts of
4 databases?

5 Moving on, I think this has also sort of been mentioned, this
6 idea of tokenization of patent ownership. This has been discussed
7 in real estate and other areas of ownership. And of course, this
8 would be great for developing a patent marketplace. As many of you
9 know, most patents are never licensed, and so oftentimes a lot of
10 money is spent on developing patents, but they're not really
11 valuable.

12 Tokenization of patent ownership via NFTs would create a more
13 liquid sort of marketplace, an ability to, like I said, commodify
14 expensive assets without necessarily licensing them. Of course -
15 and I have no answer for this - but the question is, if you do
16 tokenize ownership and people get to buy little pieces of a patent,
17 are they still considered a joint owner of the patent under 35 USC
18 262, and all that comes with that, meaning that they can all
19 license without anyone-- all the other owners' involvement. And so
20 essentially what you have is a very useless sort of patent that
21 thousands of owners of that patent can actually license at their
22 own discretion.

23 Of course, there's another question is, is the marketplace--
24 is the tokenization of a patent via an NFT, is that a license that
25 you're selling the patent or are you selling it or you're merely
26 licensing it? And of course, the distinctions are valuable
27 distinctions in terms of what you can and can't do with that
28 patent.

29 Moving on. So again, one of the values of selling a patent via
30 an NFT is of course you can create your own bespoke license via an
31 NFT to sell or license your patent to various different

1 stakeholders. And again, each of those sort of licenses would be
2 recorded on whatever blockchain you are using for those NFTs. Of
3 course, on the flip side of that, you may have naive sort of users
4 and whom-- they may purchase an NFT of a patent, assuming that they
5 may get a whole host of rights with that NFT associated with that
6 patent. In reality, there's no reason why that NFT has to provide
7 any rights associated with that patent. So there is an opportunity
8 here to sort of trick naive sort of traders.

9 An interesting sort of issue that is unrelated to what I've
10 been talking about until now is the issue of exhaustion. As we
11 know, the Federal Circuit was overruled in 2017, in terms of what
12 does exhaust the patent, and they were pretty clear on it. But I
13 don't know if it remains to be clear, whether or not if I sell an
14 NFT representing an invention - so not representing a patent, but
15 actually representing an invention - does that actually exhaust
16 that patent? I don't think that's been tested anywhere. It would be
17 interesting to see what would happen in that sort of case.

18 Of course, that also goes to the issue of when I do sell an
19 NFT downstream of an invention, is that a license or a sale of that
20 invention? It's not clear what represents a license or what
21 represents a sale, and oftentimes NFTs are licensed and not sold.
22 But again, that's a three-way circuit split in terms of what
23 defines a license-- what defines a sale. And it just gets confused
24 even more when you throw NFTs into the mix. Moving on--

25 <DAVID GERK> Unfortunately, Dr. Greenbaum, we've hit your ten-
26 minute mark, so we have to move on to the next speaker.

27 <DOV GREENBAUM> Okay. I apologize.

28 <DAVID GERK> No, thank you very much for your remarks. As I
29 said before, it goes quickly. Our next speaker is Mikal-Ellen
30 Bennett. Please? Thank you.

1 <MIKAL-ELLEN BENNETT> Yes, hi there. First of all, thank you
2 for inviting me. And also it's Mikal-Ellen Bennett, said just like
3 the man's-- Michael.

4 <DAVID GERK> My apologies.

5 <MIKAEL-ELLEN BENNETT> It's fine, it's fine, it's fine. So I
6 am a practitioner at a very small firm in North Carolina. We're
7 located-- we have offices in North Carolina, so most of our clients
8 are small or growing and originally small businesses, startups. So
9 I will try to be brief in my remarks. And I think I'm going to
10 bring a bit of a different view to this as a small firm
11 practitioner. I've advised many clients regarding NFTs, but I also
12 assess all of their IP needs when I'm working with these clients.
13 So that perspective may make my thought process here a little bit
14 different.

15 I am a registered patent attorney for, well, let's just say
16 over a decade, I don't want to show my age, but my natural instinct
17 when it comes to NFTs, when I first started thinking about them in
18 terms of IP was copyrightable, of course, trademarkable even in
19 some circumstances. Patentable, maybe a few, maybe. But my knee-
20 jerk reaction was rare circumstances. I have had clients, small
21 business clients ask me about these things in my practice.

22 So I am a biochemist by training, so I'm pretty familiar with
23 the plant patent side of things, as well as the design patent side
24 of things. And then I know that the literature out there today, the
25 popular view is to treat them along the lines of design patent
26 applications. But even that, those two frameworks of design patent
27 applications and plant patent applications, neither one of those
28 frameworks really fits very well with these NFTs, and I'll discuss
29 that in more detail.

30 The panelists who've have spoken before me have given great
31 insight and clarity, wonderful remarks into the basics of the NFTs

1 and how these NFT patent applications, of course, would be
2 different from other types of patent applications due to the
3 absolutely unique nature of the emerging technology of NFTs and
4 blockchains and Web3 itself. Their views on the state of the
5 industry have just absolutely been beautifully articulated and I
6 think everybody can learn a lot from that.

7 The popular viewpoint, as I said in the literature, in the
8 academic discussion, seems to be treating NFTs as design patents.
9 And while my knee-jerk reaction is a bit more like the previous
10 speaker, Giovanna Fessenden - with this space could benefit from a
11 more laissez faire, hands off approach - you know, that also
12 dovetails nicely with Mr. Stignani's statement of NFTs are much
13 more hyped than practical at this point. And from the small firm
14 practitioners' point of view, I have to agree.

15 Then, so that kind of makes it-- in order to begin issuing
16 patents for NFTs en masse, you'd have to almost come up with a
17 totally new framework to treat these patent applications the same
18 way as we currently treat the special case types of patents, such
19 as plant patents and design patents, if the Patent Office were to
20 proceed in issuing NFT patents in the same vein as design patents,
21 as the literature currently discusses.

22 But they are different than design patents, with a whole host
23 of issues regarding the underlying asset. For example, as Mr. Wolfe
24 touched on in his remarks there - I believe the first speaker -
25 where the underlying asset is not necessarily as likely to be a
26 protectable article of manufacturer, like with a design patent. So
27 this would undermine the entire design patent framework. If the
28 underlying article of manufacturer - whatever that NFT was
29 protecting - was not that article of manufacture. And. in addition,
30 with the design patent framework, you have the issue of
31 ornamentality. Not all of these NFTs are necessarily going to be

1 ornamental to their underlying asset. So there's not a great fit
2 once you dig down into these more nuanced elements of that design
3 patent, I don't think.

4 To me, they do look a bit more like plant patents. But again,
5 like a plant patent, each NFT - as Mr. Wolfe pointed out, and I
6 think, I think somebody else did too - the NFT application would
7 have to stress a technological improvement or a distinguishing
8 feature of some type, much like a plant patent application would.

9 From what's what all is out there in the prior art world and
10 that prior art world -as Mr. Wolfe did point out - was absolutely
11 overwhelming, not just in terms of what all is patented, but in
12 what all exists in the NFT space that is not patented, which is
13 almost all NFTs to date.

14 So that would be a very [network connection drops for a few
15 seconds] improvement. The degree of improvement or distinction, of
16 course would be quite different. Magnitudes of order smaller in the
17 NFT scenario than in the plant patent scenario, thereby making it a
18 much finer distinction, and thereby making that framework a little
19 bit of a tough fit for direct application to NFTs as well.

20 The other issue that comes up is AI. A lot of these NFTs that
21 are generated today, like take Twitter for example, where you can
22 just press a button and AI will generate your NFT that you can use
23 as your avatar. AI can do the whole process of generating that NFT.

24 In plant patents, AI can of course generate a DNA sequence,
25 for instance. But it actually takes a human to execute the steps,
26 like transfecting the DNA into an organism to make the actual plant
27 for which you are seeking a patent, the patent protection. With
28 NFTs, AI's doing all of those steps. So the issue of AI as an
29 inventor, to me, makes patents just as a whole an incredibly
30 uncomfortable fit for this new technology.

1 The useful life of the underlying asset, of course, would be
2 another difference with design patents. So, much like design
3 patents have a shorter term, I believe the term of the NFT patent
4 would probably need to be addressed in a framework for
5 patentability. Perhaps you do an even shorter lifespan still for an
6 NFT patent, for instance. I mean, I don't know, but I'm just
7 saying, the life of the underlying asset seems to possibly be an
8 issue as well, with patentability of these NFTs that we are
9 discussing. And again, the use of AI should be strongly considered
10 because it's going to come up as AI is the inventor, because I just
11 pressed a button and AI generated this.

12 So these kinds of issues-- I don't envy the U.S. Patent and
13 Trademark Office and your task in front of you in generating this
14 new area of patent law. But I do thank you for your time and
15 hearing from a small firm practitioner and our more broad view of
16 how we've seen NFTs treated, which is just cursory inquiry, a
17 little bit of trademark prosecution at this point.

18 <DAVID GERK> Thank you very much, Ms. Bennett. We very much
19 appreciate your insights and remarks. Our next speaker is
20 Kristopher Kastens, please.

21 <KRISTOPHER KASTENS> Thank you. Sorry, I'm getting I was
22 getting some echo there.

23 What I want to focus on - I know we've covered a lot of ground
24 already with the speakers that we've had - I want to go over some
25 issues regarding, first, how NFTs are patentable and how patents
26 relate to NFTs.

27 So, when we're talking about NFTs, we're talking about a data
28 structure that really has many use cases. And I don't want to lose
29 focus on that because it's gotten a little bit of a bad rap in
30 recent days because people have been focusing on how an NFT is a
31 representation or a link to a data structure regarding a cartoon

1 picture. But I would say generally NFTs are used in a much broader
2 sense. And I am somebody that is very interested in the complete
3 use space for NFTs. And I think they have a lot of applicability
4 and are patentable in certain instances with respect to how they
5 are used, and particularly when it comes to systems where NFTs are
6 utilized as portions of those, and are utilized for particular
7 aspects of, the data infrastructure of how those are used.

8 So, I really want to focus on a couple of different issues.
9 And so, one of those is 101, right? I mean, I think that's the
10 elephant in the room when it comes to NFTs, which is, what is
11 patentable, actually under the current patent structure?

12 And so, as I've said, NFTs are used in a number of different
13 ways. And so what we've used them for is very important, I would
14 say, because they can be utilized in very complicated systems as an
15 aspect of those systems and very novel systems for an aspect of
16 those systems. So I don't want to lose the forest for the trees
17 with respect to how they are utilized.

18 NFTs are generally just tokens that have individualized
19 properties associated with them, similar to - I'm assuming many of
20 those on here have a programming background - similar to how a
21 different variable will be able to store different value, NFTs can
22 be able to store different values associated with that within a
23 system, but generally they can be public - a public blockchain or a
24 private blockchain - but they come with an associated background on
25 how they are, that can verify them.

26 NFTs, like I've mentioned previously, have been heavily
27 associated with particular art projects. But like I said, I think
28 they have a lot of technology associated with them that is beyond
29 art projects and can be novel and can be patentable. And so my
30 thoughts on those as a practitioner in this space is that-- I'm
31 going to focus on how the USPTO can associate with this technology

1 space, and I think it is that the USPTO has already developed
2 rigorous standards for 101 examinations and I think they should
3 continue to do that and especially with respect to the NFT space
4 and the crypto space.

5 And I think how that plays in to current situations with
6 regards to patentability is that the patent examiner is often the
7 person that is most closely associated with the actual examination
8 and the understanding of the underlying technology, as well as the
9 overarching subject matter for the area.

10 So, as I am primarily a litigator, I've seen time and time
11 again where anything within the computer science space is
12 challenged under 101 grounds. And I think that it is important that
13 the USPTO, as part of the patent system, continues to do a detailed
14 analysis with respect to the 101 grounds for the technologies
15 related to the NFTs.

16 And I think it's similarly very important that the U.S.
17 courts—I think it's important that it is reflected within the
18 actual file history of patents, so it can be understood with
19 respect to litigations and how that is actually used within, with
20 respect to, if these patents are actually litigated. Because I
21 think there is a huge number of blockchain-related patents that are
22 coming down-- coming close to issuance and issuance so far, and I
23 think they do reflect very novel aspects of technology and it is
24 imperative, I think, to have the Patent Office being able to show
25 their work with respect to how these are patentable and how that
26 will show that the particular patents are patentable to a person, a
27 neutral party of ordinary skill in the art. So I think that is very
28 important and that is a key aspect of how these patents and NFTs
29 should be used in the future.

30 I've noticed, I've already looked at the agenda for the rest
31 of this panel, and I see that we have some people from industry

1 that are going to be talking about specifics regarding reflecting
2 patents as ownership rights and NFTs. I think that's a very
3 interesting area and also one that could actually have very
4 important aspects with regards to how patents are actually
5 reflected, how they are recorded for regarding the ownership rights
6 of those. So I'm looking forward to seeing the rest of the panel on
7 that.

8 But as I've said, I think I've seen other people already
9 discuss the same things that I was planning to discuss. So I'm just
10 going to cut off my remarks there because those were the primary
11 points that I wanted to hit that had not already been hit on this
12 roundtable.

13 <DAVID GERK> Thank you very much, Mr. Kastens. Particularly
14 bringing up the enforcement issue, which I think we were hearing a
15 little bit more about for the first time. With that, we'll move to
16 our next speaker, Mauricio Uribe.

17 <MAURICIO URIBE> Good afternoon. Thank you. My name is
18 Mauricio Uribe, patent attorney and partner Knobbe Martens Olson &
19 Bear. I'm also Chair of the Washington IPA chapter. My background
20 is in electrical engineering and computer engineering and I've been
21 practicing for almost 25 years in that space. And so my
22 perspectives will come, obviously, from my experiences.

23 As we've seen with our speakers today, a number of them,
24 general comments, and the request for the comments were so broad.
25 There were so many topics to talk to.

26 I'm going to do similar to just the previous speaker, just
27 focus specifically, and I'd like to talk a little bit in terms of
28 the ownership of patents and the use of NFTs with regard to that,
29 and especially with regard to bona fide purchasers.

1 So I'm going to go ahead and share my screen. And part of this
2 is to include-- not only for purposes, but because this is made
3 part of the record, and so there's a lot of extra stuff.

4 Now, the importance from my perspective of NFTs is the
5 underlying blockchain. And from my perspective - and you heard this
6 from the speakers and assume that a number of the attendees already
7 are aware - there's three properties that I've always viewed in
8 terms of underlying blockchain. We've heard that quite a bit
9 already today. Immutability, decentralized storage, and elimination
10 of trust.

11 And I think it was an earlier conversation today-- when you
12 talk a lot about blockchain, and when you first look at those
13 solutions, the question is, how are you really leveraging these
14 aspects of immutability or decentralized storage or elimination of
15 third parties? And what you often find, with either inventors or
16 even business implementers, the utilization of a blockchain, say,
17 for example, private blockchain, you may or may not be able to
18 guarantee the immutability. And so, ultimately, I'm not sure that
19 there's a huge difference between some form of centralized storage
20 or some databases system than blockchain other than it just happens
21 to be technology that may be well run, easy to use, but may or may
22 not have those same aspects.

23 And so part of that is really important in terms of when we
24 first start looking at this and the concept we have is in terms of
25 ownership and patents, my initial thoughts were, why do we need
26 that, right? There is no really challenge to the patent asset
27 itself in terms of what the claim language is. There's no question
28 in terms of when you download a patent someone has changed the
29 claims or that you don't have trust in the Patent Office to have
30 that.

1 And so it really just seemed like-- when my initial thought
2 of, do we really need to have patent assets as NFTs? It didn't
3 really seem to jump out at me as something that was super important
4 or super strategic, other than perhaps the benefit of just
5 transactional basis in terms of not really leveraging that.

6 But it did come up in the context later. When you look at this
7 NFT, the breakdown of an NFT - you've got technology, the
8 information, the application of which we've talked about from a
9 patentability standpoint, and underlying tech or the application.

10 The information itself ends up being really important. And you
11 see that, in terms of a lot of the NFTs, the value proposition
12 often isn't in terms of the asset that's in it, right? A digital
13 image, say, for example. A lot of times, it's in the rights that
14 are transferred with that, or the transaction history, or perhaps
15 even it's tied to physical goods.

16 And that, to me, is really where it comes out in the concept
17 of the bona fide purchaser. So including the statute here again,
18 for purposes of the record, but not for reading. But this really
19 ultimately - and I think Dr. Greenbaum mentioned this - in terms of
20 the ability to record. And what we have that is, in case law and
21 jurisprudence, the balance of that recording statute for transfers
22 of assignments, grants, or conveyances and recording at the Patent
23 Office against good faith purchasers and inability to do so.

24 But it goes a little broader than that because what really
25 comes down to, where I think there's a lot of value in the
26 potential for an NFT, is that courts over the case of jurisprudence
27 have balanced the interests of good faith purchasers versus
28 potential licensees. And the fact that if a license is granted to a
29 patent, and then the good faith purchaser takes subject to that,
30 they take it subject to that license. And that really represented a
31 balance in terms of what the good-faith purchaser knew about those

1 existing licenses versus the rights of the licensee who was granted
2 a license prior to that.

3 We've also seen jurisprudence related to security interests,
4 and whether the federal doctrine supersedes out of state law for
5 perfection of the security interests in patent assets. And so you
6 see a lot of recordation also used at the Patent Office related to
7 that.

8 And then the opposite effect of that is in terms of a
9 fraudulent transfer, if you will, and someone takes a subsequent
10 license. Whether there is, in fact, the jurisprudence related to
11 whether there's a good-faith purchaser application to potential
12 licensees down the road.

13 All of those represent, from my perspective, at least some
14 balance of the court systems to the interest of either the original
15 patent owner, the potential licensee, and the potential good-faith
16 purchaser down the road.

17 So it's seems like NFTs really, in this perspective, have the
18 opportunity to provide us a solution to this, that doesn't really
19 have to result in a balance of those efforts. And so, for example,
20 here, with the good-faith purchaser running with the license, the
21 case law is pretty clear in the favor of the licensee in terms of
22 the licenses run with the patents.

23 And we've seen that similar to, with regard to, security
24 interests, also run with the patent, similar to a licensee. But in
25 that sense, the recordation statute, it seems like the state law
26 interests supersede that of the federal law because the federal law
27 doesn't seem to cover-- and in this last case here, that the bona
28 fide purchaser does not extend to potential licensees down the
29 road, of them having a bona fide purchaser defense. And so it seems
30 like there's always been a selection down the road, depending on
31 the language of the statute, 261 versus the other.

1 And it seems like what we have is in the Bored Ape Yacht Club
2 - and I know that's been mentioned a couple of times - but the real
3 question was there in terms of a fraudulent transfer of rights. I
4 know this is a copyright question in terms of that, but it really
5 raised the question, can there be a bona fide purchaser when the
6 transaction history is part of the NFT? And then that was settled
7 and so it didn't ultimately get resolved.

8 But it kind of raised that issue as like, can we have a
9 system, right? And I think Dr. Greenbaum talked about a system, can
10 we have a system where it goes beyond the requirements of 261, but
11 ultimately has a situation where we might be able to provide for
12 some kind of resolution of these balances, right?

13 With licenses records, for example. It's not required right
14 now, but if you had a transaction history, it would resolve that,
15 right? Even though licensees have the benefit of the case law, it
16 would be a part of the transaction record and you would no longer
17 have those bona fide purchasers who would take it to licenses that
18 weren't known and then you could reconfigure licenses in that way
19 of due diligence, of saying record that.

20 Security interests is the same thing. Bona fide licensees
21 could look at the transaction record of a patent and no longer have
22 to be subject to the opposite effect, of saying they're going to be
23 in favor of a fraudulent transfer, but ultimately use the NFT as
24 that mechanism, that resolution for negating that balance.

25 And so to me, that's the real opportunity for NFTs. Kind of
26 very topic, very specific. I think there's a lot of open questions
27 related to how that would be done. I think our previous panelists
28 have also mentioned the topics of anonymity, large scale licenses
29 and how that would be recorded on a per license basis and transfer,
30 and also the validation of the data itself being written to that.
31 So I think there's a lot of opportunity there. But this ultimately,

1 I think, while a very narrow issue, just seems to be a really
2 valuable place. And hopefully what we'll see is that, within our
3 jurisprudence and within our technical solution, doctrine of more
4 fair transactions with NFTs, using NFTs as a mechanism is very
5 good.

6 So with that, I'll end my comments. Appreciate the
7 opportunity. Thank you very much.

8 <DAVID GERK> Thank you very much, Mr. Uribe, for those
9 comments. And we have our final panelists here this morning. And
10 thanks to everyone for their collegiality and staying on time.
11 We're right on time. So, without further ado, I'll pass it to Joel
12 Bock.

13 <JOEL BOCK> Thank you Undersecretary Vidal and Mr. Gerk for
14 allowing me to the opportunity to speak and discuss the issues
15 relating to NFTs and Patent Office. A little about my background.
16 I'm a former digital design engineer, electrical engineer, and I'm
17 currently a partner in the Venture Technology group at Dentons US
18 LLP, and Co-Chair of the Technology Transaction subgroup. Just a
19 second... I've been practicing for almost 30 years. My practice
20 focuses on tech transactional work, patent and trademark
21 prosecution, post-grant proceedings, and patent litigation, with
22 companies in various stages of the business lifecycle, from
23 startups to multinational corporations.

24 I'm excited to be part of this discussion and helping the PTO
25 and the U.S. work through these issues to remain the world-leading
26 technology innovator. My remarks should not be taken as an
27 endorsement of any particular approach, but rather as an attempt to
28 point out issues and challenges relating to NFTs and the use of
29 NFTs to remain at the forefront of technology innovation and
30 implementation.

1 While NFTs are applicable in all the areas of intellectual
2 property law, I believe the patent space presents the greatest
3 challenges. Prior speakers have discussed the blockchain, Web 3.0
4 use cases, and benefits of blockchain. They have also discussed
5 issues relating to protecting NFT technology by patenting and the
6 challenges faced in preparing such applications, and the
7 examination and review of such technologies by the Patent and
8 Trademark Office.

9 I will try to focus on the issues that may arise in attempting
10 to integrate the use of NFTs by the PTO. One of the key issues is
11 to ensure that NFTs can maintain uniformity to be able to be
12 utilized by the PTO.

13 In the early 2000s, I worked with a client that had developed
14 digital postmarks for the U.S. Postal Service. Unfortunately, the
15 technology was not widely adopted because it was so innovative and
16 its benefits were not well understood.

17 Today, the benefits of digital authentication are well
18 understood and have been adopted by many industries. So one area
19 that I think needs to be examined is used by PTO of NFTs. And what
20 do I mean by that? I mean that potentially NFTs could be used to
21 represent an issued patent. In the future, the PTO can issue NFTs
22 instead of distributing physical copies of patents.

23 In the past, it was the red ribbon copy that reflected
24 ownership. We served a claim for patent infringement. The plaintiff
25 would have to present the official copy to the court. With NFTs,
26 this can change and the PTO can go fully digital. That potentially
27 could save cost for the PTO. It could enhance the way users can
28 interact with the PTO, and it will help turn the PTO into a fully
29 digitized system.

30 The benefit and promise of anonymity by using the blockchain
31 is sort of in conflict with the goal of the patent system, of

1 providing access to full information about the technology, the
2 inventor, applicant, current owner. So there has to be something
3 done about that conflict. How can that be resolved?

4 One issue is putting information about licensing of patents,
5 of an assignment of a patent, with digital contracts. A lot of that
6 information may be in the contract and that may be become part of
7 that title chain.

8 Today, many companies, instead of recording the full agreement
9 where an IP asset has been assigned, where a patent has been
10 assigned, or the full license agreement, where the entity is
11 licensed a particular patent, oftentimes other types of documents
12 are recorded, such as an assignment document, which doesn't include
13 information about the price that was paid for that assignment, or
14 the other parameters of the transaction relating to that
15 assignment.

16 Using blockchain, the Patent Office will have to figure out,
17 and users will have to figure out, how to implement that. Where you
18 want to keep certain information confidential, but other
19 information as part of that blockchain. So there's a challenge in
20 segregating that information, segregating the confidential
21 information from the title, transfer, and ownership aspects.

22 Certificates of provenance-- some of the speakers discussed
23 that. The NFT can help identify ownership. The software, it may be
24 easier to associate the NFT with the software product, with the
25 software aspect, and that could be through embedded code.

26 When you're talking about a hardware system or some sort of
27 physical object there's more challenges there. How do you associate
28 that NFT with that specific item? There has to be some identifier
29 on the item or associated with that item, the physical object to
30 associate that NFT with the physical object. With certain hardware
31 components there may be firmware that's already embedded in the

1 device and potentially you can associate the NFT by embedding some
2 code into that firmware. But for other physical products that don't
3 have firmware, there may be challenges.

4 The other challenge on provenance is, can it be used to help
5 identify infringement? Or, for example, many companies are engaged
6 in software audits to make sure that licensees are using the
7 appropriate number of licenses or appropriate number of copies of
8 the software. Can NFTs help in that situation? Potentially. An NFT
9 could be associated with each copy of the software. And if the
10 company that owns the software can track those copies and track the
11 use, there may be a better way to enforce licenses and make sure
12 that they're not being used inappropriately.

13 The issue of fractional ownership-- how do you record that?
14 One of the speakers had discussed the issue of whether a fractional
15 ownership or licensing is what is actually occurring. Well, if it's
16 fractional ownership, the owner-- if a company is selling shares in
17 a patent and there are 1,000 owners, each of those owners could
18 potentially license that patent freely without having to account to
19 the other owners. That could create major problems in protecting
20 the patent and enforcing the patent and ensuring that the patent is
21 being used appropriately.

22 There are also business benefits, opportunities for businesses
23 to connect to consumers, by using NFTs. It's easier to create a
24 digital connection than a physical connection, and that can help in
25 marketing products.

26 Royalty tracking-- there have to be ways to track royalties.
27 So can that be done digitally as well?

28 These are all capabilities that have been developed and are
29 being implemented. The question is, how does that tie into an NFT's
30 use in the Patent Office or by the Patent Office to represent a
31 particular patent or ownership of a patent?

1 Again, with the aspect of infringement, by having NFTs
2 associated with a particular object, companies can determine
3 whether there is infringement occurring with respect to software,
4 with respect to physical products, by trying to check to see if
5 those NFTs matches the NFT associated with the physical object.

6 And then the final issue I want to discuss is just protecting
7 NFTs under patent law. So currently, design patents can protect
8 designs, a particular physical image of something as long as it's
9 not functional, but it has to be applicable to a physical object.

10 In the past, the Patent Office has granted patents, design
11 patents, that cover web pages or other types of non-physical
12 objects as long as they are presented on some sort of display. And
13 there's no reason why NFTs that are associated, for example, with
14 an art object or some other physical image cannot be protected in
15 the same way through design patents.

16 As far as utility patents - I know a number of the speakers
17 have also discussed utility patents - there are, again, many ways
18 to protect NFT technology through utility patents. And since the
19 Alice decision, the Patent Office has continually updated its
20 analysis and the way it analyzes patents based on internal
21 developments and also based on Federal Circuit precedent to help
22 innovators and help patent attorneys understand how to protect
23 software patents and how to draft patents in order to protect those
24 innovations.

25 So I leave you all, as the final speaker, I thank everyone for
26 all the interesting presentations that have been made today. I
27 thank the Patent Office for giving us the opportunity, as patent
28 practitioners, to contribute to this important area. And I hope
29 that we continue to work together to innovate and help the Patent
30 Office become the strongest patent Office in the world. Thank you.

1 <DAVID GERK> Thank you very much, Mr. Bock. And again, thanks
2 to all our panelists this morning. A really lively discussion, a
3 lot of great insights, which were, of course, really appreciative
4 of having this expertise. We're right on schedule. So again, I want
5 to thank you all on the first panel for being mindful of time.

6 We're going to take a break now. Hopefully, folks will grab a
7 bite to eat or take a break and return with us. We're going to
8 start back up at 12:30, maybe a minute or two after at worst,
9 hopefully by 12:30. Please come return. We've still got an equally
10 enlightening panel on the second half focused on industry
11 representatives, and we look forward to seeing you back here at
12 12:30. Again, 12:30 we will resume. Thank you all.

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14 < END OF SESSION 1 >
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1 SESSION 2: INDUSTRY REPRESENTATIVES PANEL

2
3 <DAVID GERK> Good afternoon everyone, and welcome back to our
4 roundtable on patents and non-fungible tokens. We had a very
5 productive first morning session. Hopefully you were able to join
6 us. If not, we welcome you. And we're going to jump right in, for
7 time purposes as well, to continue our efficient discussion of
8 these important topics.

9 So our first speaker is Dorothy Haraminac. So, Dorothy, please
10 go ahead.

11 <DORTHY HARAMINAC> Thank you. So, I'm Dorothy Haraminac, and I
12 will address three issues: the call for aggressive enforcement,
13 misconceptions of IP ownership, and unrealistic standards as a
14 governor of implementation.

15 The call for enforcement is paired with a complaint about a
16 lack of identity on NFT sales platforms. There is case precedent
17 for platforms that profit from sales of illicit goods between
18 unidentified users. In the United States v. Ross Ulbricht, the
19 defendant was the alleged platform administrator and was held
20 accountable for the actions of its users, most of whom were not
21 identifiable. He was convicted and sentenced to two and a half
22 lifetimes, largely based on the volume of transactions and the
23 illicit nature of goods transferred between users. He neither sold
24 nor shipped these goods himself. I don't think those calling for
25 aggressive enforcement for trademarks intend to call for something
26 more aggressive than two and a half lifetimes, and that's not the
27 fairest comparison. But the fact remains, when platforms traffic in
28 and profit from counterfeit goods, criminal causes of action may
29 exist.

30 I hear a similar call for enforcement echoed in this
31 roundtable for patents. I would caution the USPTO against

1 introducing actions that are served with existing regulations, such
2 as those holding sellers accountable when they offer infringing
3 products for sale, consumer regulations, and contracts.

4 The concept of holding platforms accountable for enabling
5 sales between users has been tested in court, and it is the court
6 system that provides an appropriate venue for enforcement related
7 to infringing products. Harsh penalties for repeat offenders, such
8 as large retail chains that actively monitor small business trends
9 for the purpose of infringing on their designs, may disincentivize
10 predatory behavior. However, the USPTO's role in that regard is
11 limited.

12 There is a presumption that the rightful inventor receives the
13 IP right, but this is not reality. An inventor is made rightful
14 only after overcoming the hurdles of cost and complexity to file
15 with the USPTO. An underrepresented group in this study are
16 individuals who would hold IP rights - but don't - because they
17 cannot afford to hire an attorney and cannot navigate the complex
18 registration systems. There's another group who choose not to be
19 identified that I'll get to later.

20 NFTs and public blockchain technology can reduce cost and
21 complexity if implemented by the USPTO. Features such as
22 immutability, decentralization, and security can reduce barriers
23 for would-be patent holders. However, once these features are
24 eroded, that utility is also eroded. This occurs when features such
25 as public are switched to permissioned, when decentralized becomes
26 hybrid, or when immutable becomes edited.

27 I encourage the adoption of technology to reduce barriers to
28 entry into IP ownership, and I caution against the use of eroded
29 technology masquerading as though it still maintains the same
30 features of a public blockchain.

1 The presumption of rightful ownership is also implied in a
2 chart shown by others, which claims an increase from 17% to 90%.
3 Now, this chart does not differentiate between IP that forms the
4 basis of innovation and patent trolls, which stifle innovation.

5 IP owners face an additional hurdle after overcoming cost and
6 complexity, which is the high cost of defending their IP, and that
7 high cost serves a purpose. It disincentivizes patent trolls. The
8 USPTO should not reduce cost of defense without addressing the
9 initial barriers to entry first. To do so stifles innovation and
10 favors current ownership over new applications.

11 I also implore the USPTO to execute a diligent consideration
12 of the public space and avoid lowering the bars for novel,
13 nonobvious and other requirements. The public space for NFT
14 concepts are not well indexed by common search engines, so the
15 USPTO needs to familiarize itself with where these things are
16 discussed and developed.

17 The USPTO can address barriers to entry by enforcing a narrow
18 reading of existing regulations, treating specific metaverse
19 environments as individual industries, and adopting blockchain
20 processes that maximize efficiency, transparency, and data
21 integrity.

22 In the patent system, an NFT appears to be an article of
23 manufacture. It is manufactured by software methods, and those
24 specific methods may be protectable under a utility patent and
25 those methods may qualify as trade secrets with the use of
26 homomorphic encryption and other treatment.

27 The resulting article of manufacture may exemplify a design,
28 but is not a design in and of itself. The use of that article may
29 play a role for other IP rights, such as trademarks.

30 This is not a laissez faire approach and these protections
31 already exist. The role of the USPTO should not expand to

1 manufacturing. As an issuer of NFTs, the manufacturing service
2 belongs in the market, not in the hands of the USPTO. If the USPTO
3 issues NFTs, they should be limited to recording the patent itself
4 and licensing thereof, and should not venture into manufacturing an
5 applicant's design or function. And this does not preclude the
6 USPTO from using NFTs or public blockchain technology to improve
7 its process, just as it has improved patent applications with the
8 advent of the internet and databases.

9 New technology must surmount the application of unrealistic
10 standards as a governor on implementation. The appropriate
11 comparison is not an imaginary ideal where enforcement is cheap,
12 all bad actors are easily identified, all products fit in nice neat
13 boxes, and all transfers are recorded in real time. That ideal
14 doesn't exist in the current system and is an unrealistic demand
15 for any new system, although a blockchain may help with some of it.

16 The appropriate comparison is the current system, which has a
17 high cost of entry, a steep learning curve, and a high cost for
18 enforcement. If the adoption of a new technology alleviates those
19 barriers, as compared to the current system, then it is worthwhile
20 to pursue. That pursuit should consider additional risks of new
21 technology. But those risks must be balanced against the benefits
22 that tech provides, both from an industry perspective and from a
23 USPTO adoption perspective.

24 I've heard references to Bitcoin. The reason Bitcoin was not
25 patented and its creators do not identify themselves was a choice.
26 And those people are examples of opting out of identity online in
27 favor of privacy, transparency, and security.

28 That choice happened because Bitcoin contains cryptographic
29 methods known as encryption algorithms. Exporting encryption
30 algorithms outside the United States may draw investigation under

1 EAR and ITAR, which control the export of weapons. Some encryption
2 is classified as a weapon in this country.

3 There is a strong culture of privacy and transparency inherent
4 in the blockchain space that runs counter to a centralized identity
5 system. The USPTO should consider enabling an unidentified owner to
6 apply and own IP rights. They could offer security over IP
7 ownership, without storing identity information whatsoever. The
8 systems that support doing so were designed in the 80s and 90s and
9 were the foundation of Bitcoin. The USPTO and others who centralize
10 identity storage must acknowledge the risk their display of
11 identity information poses as a source for theft. And it must
12 consider the use of homomorphic encryption, which protects data in
13 use. The USPTO must also consider how many would-be owners opt out
14 of seeking ownership because of the risks posed by exposing their
15 identity online. And I encourage the USPTO to consider a system
16 that no longer requires the submission, storage, and display of
17 identity information.

18 Address the cost of complexity of applications. Address the
19 risks that you pose by posting so much identity information online.
20 Address the cost for enforcement with a balanced consideration of
21 both current owners and of future applicants. And do so by
22 comparing the proposed solution to the current system, not to an
23 unrealistic ideal. This concludes my remarks.

24 <DAVID GERK> Thank you very much for those remarks, Ms.
25 Haraminac. Our next speaker is Leann Pinto.

26 <LEANN PINTO> Hi everybody. I am-- let me get to screen share
27 here. Hi, thank you for joining me. I'm Leann Pinto, president of
28 IPwe.

29 I want to first start by thanking Undersecretary Vidal and the
30 USPTO for this opportunity. IPwe is a global innovation leader in
31 AI and blockchain-based IP analytics, software, and services. IPwe

1 is at the forefront of the digital transformation of IP, which
2 we're fostering worldwide with the introduction of our
3 revolutionary patent NFTs. We believe this is the first real
4 blockchain NFT use case for business. So I'm honored to be here
5 today as an industry representative to the USPTO's patents and non-
6 fungible tokens roundtable discussion.

7 A little bit about IPwe. IPwe was founded by Erich
8 Spangenberg, a true visionary in the IP space and a leading
9 practitioner in patent monetization. Erich realized early on that
10 patents were an untapped asset class. Even with the successes, he
11 realized, he understood that the innovation engine was not being
12 fueled appropriately. There are many valuable patents hiding in
13 plain sight, with many businesses and inventors incapable of
14 realizing any return on their investment.

15 Indeed, the fundamental business problem in the IP space is
16 that patents, and intangible assets generally, are underutilized,
17 undervalued, and generally misunderstood.

18 Currently, there are approximately 25 million active patents
19 in the world, all with low transaction, commercialization, and
20 financing rates due to lack of transparency, liquidity, and no
21 standardized asset valuation metrics.

22 Upon seeing the potential of blockchain, and in particular
23 NFTs, to address the friction and inefficiencies present in patent
24 transactions, IPwe was founded in 2018.

25 How are we addressing this fundamental problem? IPwe
26 originally announced that we are tokenizing the corpus of issued
27 active patents worldwide to the tune of 25 million patent NFTs.
28 These patent NFTs power our Smart Intangible Asset Management tool,
29 which is a SaaS solution for IP analysis, valuation, and management
30 in one platform. We launched SIAM formally last week, concurrently

1 with the news of our digitalization of 25 million patent assets as
2 dynamic NFTs.

3 IPwe, through SIAM and patent NFTs, seeks to empower all
4 internal stakeholders with simple, consistent, relevant financial
5 and performance metrics to further innovation. And this is being
6 done by patent NFTs.

7 How are we going to achieve this goal? The data is fed into
8 our patent NFTs, which we call IPwe Digital Assets, by our partner
9 directly, Clarivate. Clarivate is the worldwide leader in IP data,
10 and they have the best-in-class patent datasets.

11 IPwe takes and populates our patent NFTs with pertinent,
12 publicly available data feeds from Clarivate to initially mint the
13 dynamic patent NFTs. Then these are available-- these are securely
14 stored on Clarivate's blockchain. Patent entities can then be
15 updated with patent owners' private data about each asset,
16 including licensing, transaction history, evidence of use,
17 prosecution history. Any data that's associated with that asset can
18 be added there. The NFTs are also accessible anywhere, only by the
19 private key holders, which ensures any private data that's added
20 remains confidential.

21 By tokenizing patents to operate underneath SIAM, IPwe is
22 ensuring that all patent owners can have increased efficiency,
23 transparency, and trust in the IP space, experience improved patent
24 portfolio management, creating value and liquidity for patent
25 owners, and making the system more approachable and easy to use for
26 all.

27 There's many advantages of maintaining an IPwe digital asset
28 of a real-world patent asset. These have been discussed earlier
29 today. Two of the main ones are data aggregation. IPwe digital
30 assets can aggregate all relevant data about patents in one place,
31 allowing for quicker, more efficient analysis, and data

1 verification as well. Collected data is only valuable if it's
2 trustworthy. When adding a data point to an IPwe digital asset,
3 IPwe and other third parties can confirm its level of
4 trustworthiness, as we've heard others discuss earlier today,

5 IPwe's goal is to at some point ensure all the history of a
6 patent will sit on its corresponding IPwe Digital Asset, not just
7 who owns it, but who's licensing it, who's commercializing it,
8 who's financing it. All of this information can be used to confirm
9 value, making for a robust, liquid transferable asset.

10 The digital transformation of patents into NFTs benefits the
11 patent owners, as well as its licensing and commercial partners, by
12 increasing transparency around the assets, which in turn increases
13 value and commercialization rates.

14 Patent NFTs will also benefit banks, insurers, capital market
15 players, basically anyone who lends, insures, or financially
16 engages with IP. By making trading IP more cost-efficient and
17 simplified, with all key information about an asset standardized
18 and stored in one easy-to-access, secure location.

19 I believe my remarks have touched on most of the topics for
20 public comment, but I wanted to call out a few specifically for
21 further elaboration. Topic one was about the current uses of NFTs
22 in your field or industry. IPwe isn't aware of any other use cases
23 of enterprise or government using NFTs as a digital encapsulation
24 of pertinent data concerning a patent asset. We believe our recent
25 announcement of the tokenization of 25 million dynamic patent NFTs
26 is revolutionary and an extremely useful future application of NFTs
27 in the IP space, starting first with patents. But we also believe
28 that many other types of IP assets will be well-suited for
29 management via NFT technology, including trade secrets and know-
30 how, among others.

31

1 Topic Two, about IP-related challenges and opportunities. We
2 feel there are more opportunities posed by NFTs than challenges.
3 Simply storing all relevant data about one patent in a single
4 location, instead of spread across multiple disparate databases,
5 will allow enterprise to achieve a level of efficiency never before
6 known.

7 We believe the largest challenge is not necessarily IP-
8 related, but more so, technology adoption-related. The current uses
9 of NFTs have distorted the true nature of what an NFT is. It's a
10 simple, digital encapsulation of data.

11 Topic Eleven is about adjustments being made to IP portfolio
12 planning and management. IPwe hopes that patent owners will
13 eventually manage their entire patent portfolio with patent NFTs
14 and our SIAM solution.

15 We have experienced great interest in the digital
16 transformation of IP, in particular patents and trade secrets in
17 Japan. The government of Japan has recently issued revisions to a
18 corporate governance code that requires reporting of a company's
19 investments in intellectual property, as well as its utilization,
20 in an understandable and specific manner. We believe that
21 corporations in Japan will be adjusting their IP portfolios, and
22 management thereof, in response to these recent revisions. We hope
23 that the companies and enterprise in the United States will follow
24 suit.

25 In conclusion, the USPTO's study explicitly acknowledges that
26 blockchain and its applications, like NFTs, are here to stay.
27 IPwe's use of NFTs is novel. However, it's also a much more useful
28 instance, with rights that are easier to grasp and apply than what
29 is currently understood, for example, NFTs in the art world.

30

1 For us, it's really a matter of explaining how creating NFTs
2 as digital stores of IP-related data provide a powerful mechanism
3 for businesses, from SMEs through enterprise, to manage their
4 portfolio of IP assets. And then how beyond simple tokenization,
5 IPwe Digital Assets will eventually unlock additional commercial
6 opportunities and a larger ROI with greater efficiency than has
7 ever before been seen by players in the IP space.

8 IPwe believes that patent NFTs are at the heart of the digital
9 transformation of IP, providing a unique, elegant, and
10 revolutionary solution to known problems in the IP space. I want to
11 thank you very much for this opportunity to extol the virtues of
12 NFTs as applied to patents. IPwe hopes that many others come to
13 appreciate the volume of issues that can be solved with
14 tokenization of patents and the digital transformation of IP. Thank
15 you.

16 <DAVID GERK> Thank you very much for those remarks. Ms. Pinto.
17 IPwe was mentioned in the first panel, so it was great to have you
18 here to give your perspective as well, to supplement that
19 discussion. So thank you again.

20 Our next speaker is Robert Mowry.

21 <ROBERT MOWRY> Hi everyone. Pleasure to be on the call. My
22 name, as David was saying, is Robert Mowry. I teach the blockchain
23 certificate at UCLA Extension and I have a consulting firm for
24 businesses here in California and the broader states called Rekt
25 Tech.

26 And there are a few points that I wanted to make in terms of
27 the utility of NFTs and the way the Patent Office can roundly look
28 at protecting what needs to be protected and taking a hands-off
29 approach from what exactly would need to be protected for the
30 broader ecosystem as a whole. So limiting the scope, and then
31 including the point-specific areas that would need to be addressed.

1 So, first on metadata. So metadata that spells out the IP
2 rights is integral to be able to communicate effectively what the
3 value would be best communicated to be. And that is a way that you
4 can have an NFT participant that would be doing a mint or be
5 fractionalizing some digital asset or asset that would have a title
6 on the blockchain to be able to spell out exactly what permissions
7 are being granted. So being able to have that communicated broadly
8 and be interpreted as it's spelled out in the actual metadata.

9 And then the use of IPFS as a storage mechanism. So not having
10 to concentrate-- the storage of a file, whether it be audio, video
11 or what have you, onto any sort of centralized server, but allowing
12 that to be done on the Interplanetary File System that's
13 traditionally used nowadays, and hopefully would be broadly adapted
14 in the future.

15 The open-source tooling around NFT, being able to be broad in
16 scope such that you can mint a non-fungible token using a variety
17 of means and still have that be an acceptable protocol that's
18 readable across numerous blockchains wherever it may be minted,
19 either on a permissioned basis or on any number of public-facing
20 blockchains.

21 With respect of recurring artist royalties, although there are
22 significant artist resale right protections in the UK and France
23 and really a select few countries, in many nations the art dealers
24 themselves have significant power, lobbying power and so on. So the
25 actual respect of the resale rights is not broadly seen. So NFTs
26 really have ignited in the way they have because they were able to
27 include a resale element that's allowing an artist or different
28 type of creator to continue to get that flow of income, that if you
29 were an art dealer, I would purport that you would want to support
30 their continued efforts to do a solo gallery or to broadcast their

1 career in a way that would be beneficial to you as an owner of
2 their art or digital assets.

3 And then as Ms. Haraminac was talking about earlier, the
4 homomorphic encryption, or some sort of tooling that would separate
5 an identity with what would to be consistent with what we see
6 today, when you might file a patent, stateside, needing to have a
7 person's identity or something like that.

8 The need to protect digital identities, especially as we enter
9 the metaverse or have a digital twin online, not have to be going
10 around the digital experience with our government identity is a
11 useful tool and it can protect us, not to the degree that we don't
12 want to obfuscate ourselves from the government or Patent Office or
13 regulated players that we're happy to disclose ourselves for and
14 respect the KYC and AML or anything that's requested of us, but
15 just as a protection for that data that's put out there.

16 And even sharp technology companies have demonstrated that
17 they've had difficulty navigating and not getting hacked. So the
18 real utility of these NFT platforms and assets is the on-chain
19 ownership that makes provenance for art and any number of different
20 assets that have value associated with who's owned it and who's
21 collected it, who's distributed it. Is it authentic to that artist?
22 Is it from their wallet?

23 That's of huge value that often makes it very difficult when
24 you're trying to auction off things and you're having to say, well,
25 this may have been owned by this person, but we can't verify it and
26 we have a handwritten letter. The blockchain makes it much more
27 clear to have that done to the degree that it can be continued to
28 be nurtured, is worthwhile, and the utility of asset
29 fractionalization, which we're seeing much more on the finance
30 side, of people securitizing their funds and fractionalizing it,
31 and using the blockchain as a settlement means for assets, as a

1 whole, on the financial side, but increasingly in the world of art
2 and elsewhere.

3 But I think the utility is broad, and when it comes to
4 patents, the other speakers were speaking very intelligently and
5 impressively on the utilization of NFTs for patents that would
6 communicate the actual ownership.

7 But it's even more than that. So UC Berkeley last year had an
8 NFT of the actual patent disclosures associated with their ones
9 that were quite visible for CRISPR and cancer immunotherapy. And
10 they were able to raise money just on the historical value of these
11 disclosures themselves without transmitting any sort of significant
12 value that would be associated with these patents.

13 So, in conclusion, just respecting the ways that the NFT
14 technology can broadly benefit players in the space, whether or not
15 they have all their identity online, and the ways that U.S. can
16 continue to be a lead in these technological issues, but protect
17 those that are first movers and are building out the early
18 technologies.

19 <DAVID GERK> Thank you very much, Mr. Mowry, for your remarks.
20 Our next speaker is Kary Oberbrunner.

21 <KARY OBERBRUNNER> Thanks so much, David. I'm going to share
22 my screen, so if you can let me know if that comes through, that
23 would be fantastic. Can you see it, David?

24 <DAVID GERK> We can see it now, thank you.

25 <KARY OBERBRUNNER> All right, thank you. It's great to be
26 here. I want to thank the USPTO for their interest in this exciting
27 new technology. I want to thank Director Kathi Vidal as well.

28 I'm going to focus specifically on the fact that we now live
29 in a world where any time there's friction, we are headed for
30 disruption. We probably are all familiar with some of these
31 different companies or products or technologies - Bitcoin, Uber,

1 Netflix, Alibaba, Airbnb, Amazon, and Facebook. And each one has
2 evolved, some with controversy. However, each one has a unique
3 place in the market because of friction. And anytime friction
4 evolves to a place where it costs too much time and money,
5 disruption is sure to follow.

6 I believe that today's IP process regarding patents has
7 friction. I personally have patents that are pending, and the
8 average cost of a patent is between \$15-20,000 and more. I'm not a
9 lawyer, however, I have a fantastic one. And the average time takes
10 around three years. We have a lot of lawyers that are involved in
11 this panel, and I'm very grateful for them. We know that 80% and
12 more of patents are rejected, and they have to go back for
13 additional clarification, research, documentation, which causes
14 more friction.

15 We have a process that protects IP that costs \$100, and it's
16 possible in 24 hours. And it's heavily dependent upon blockchain
17 technology and NFTs.

18 I believe that we're here today because I represent a lot of
19 inventors and creators and thought leaders and influencers.
20 Blockchain has made it possible to have decentralization.

21 And I personally am an author. I have a doctorate. I'm a
22 university professor. But I myself published books. Here's just
23 some of my clients-- and we essentially are a publisher, so we do
24 IP publication.

25 We've grown over the years to include thousands of authors.
26 And these authors are actually listening to the panel today. They
27 care about this because every book represents intellectual
28 property. And you can see that we also, as a company, focus on IP
29 promotion. I believe that a book is not just a book. A book is not
30 just a business card. A book is supposed to go from a message to a
31 movement. And so in our company, Igniting Souls Publishing, we

1 basically take a book and turn it into 18 streams of income. And
2 you can see that an NFT could actually be a container for those
3 different 18 streams of income.

4 I knew that the world was changing. I felt it. And about two
5 years ago, I said, what is going on? I need to solve this thing.

6 And so whenever I don't know the answer to something, I do
7 something dumb. I go write a book on it, because I feel like if I
8 am going to understand it, I need to master it.

9 So this is a book that just came out. It's my book. I cowrote
10 it with Lee Richter. Lee Richter is currently working with the
11 Vatican on an NFT project. One of the NFT projects that they're
12 doing is literally licensing David, as in, like, Michelangelo's
13 David. And when you purchase that NFT, which they call a key, you
14 get access to the Pope.

15 And so you're starting see very practical use cases of what
16 NFTs can do. This is a chart from the book that I wrote.

17 And I know I have about six minutes left because I'm timing,
18 so I'm going to go fast.

19 But I want everyone to realize, we throw around these terms,
20 and we don't know what they mean, or we just glaze over. But Web1,
21 Web2, and Web3, the different components are in red. And we could
22 unpack this for a long time. We don't have time today. But I want
23 people to realize that in Web1, they created and they owned.
24 Meaning the industry, the man, whoever you want to say, the woman.
25 Web2, we create and they own. In other words, we were the ones
26 creating YouTube videos, Facebook posts, Twitter tweets, and yet
27 Big Tech owned it.

28 And when the social dilemma came out, we realized, oh my gosh,
29 there's data mining going on. Web3 paves the way for creators. It
30 actually brings a decentralized internet, of which NFTs play a
31 role, i.e., digital assets, and blockchain is the railroad, and

1 crypto is the currency. And you'll see here below that, I'm
2 specifically going to finish my second half talking about IP.

3 This is a picture of the S&P 500. In 1975, 17% of the S&P 500
4 was intangible assets. What we're talking about today, patents.
5 Today in 2020 - actually, we're not in 2020, but you know what I'm
6 talking about - we're now 90%. And so this is absolutely flipped.
7 We live in a different economy.

8 And so we as a company said we better focus on IP protection
9 as well. I started a second company called Blockchain Life, and
10 this really rounds out what we do - IP publication, promotion, and
11 protection.

12 Anytime consumers feel like there's too much friction, they're
13 going to choose another path. And it costs too much time and money
14 in its current form, when the technology of blockchain and NFTs
15 allow speed. And yes, I'm an entrepreneur, I love speed. And yes,
16 there's some other people here that are that great other side of
17 the equation, which is legislation and governance, which we need.
18 But I would argue today that anybody on a Mac or a PC can
19 literally, with a few keystrokes, make a TM, a C, or an R with a
20 few keystrokes.

21 Which begs the question, there's disruption going on, and
22 there's a lot of people who are just using copyrights that aren't
23 actually protected and there's confusion. And we feel that as
24 consumers.

25 I would say we're having right now what's called a wet
26 signature moment. And what I mean by that is, prior to 2000, we had
27 to do wet signatures. When 2000, the legislation said that we could
28 now do digital signatures - electronic signatures - what happened
29 was it massively opened up growth and progress.

30 And today we're having a wet signature moment with IP where we
31 can literally open up new growth and progress by removing friction.

1 And so I believe NFTs do that. I don't have time to go into all the
2 detail today, but obviously blockchain is the railway, NFTs are
3 built on top of it. They have smart contracts.

4 And I believe - as some of my other amazing panelists shared -
5 the use case for NFTs. I don't think it's just fad art. I love
6 utility, and blockchain allows us to have a decentralized database,
7 ledger, where now we can put upon that smart contracts, which are
8 self-executing and bring a variety of benefits.

9 And I believe that everybody's smartphone in the near future -
10 if not already - is going to house NFTs that are represented as
11 medical records - health tracking, document storage, credits,
12 debit, biometric data, investments, and yes, even patents and
13 copyrights and trademarks.

14 So in conclusion, the world is changing. Will you be ready or
15 get left behind? Thank you very much for your time today.

16 <DAVID GERK> Thank you very much, Mr. Oberbrunner, for your
17 remarks today. Our next speaker is Cleve Mesidor.

18 <CLEVE MESIDOR> Good afternoon, can you hear me okay? Thank
19 you for having me on. I am Cleve Mesidor. I am thrilled to be here.

20 I am the Executive Director of the Blockchain Foundation. We
21 are a 501(c)(3), and we focus exclusively on education. Previously,
22 I was a public policy advisor for the Blockchain Association, which
23 is the largest advocacy group for the crypto space in Washington
24 D.C. I also serve as a mayoral appointee to the DC Innovation and
25 Technology Inclusion Council.

26 I've been working in crypto for six years. Previously, I
27 served in Congress and then I served in the Obama administration.
28 Interestingly, it was during the Obama administration in 2013 that
29 I first learned about bitcoin. While as an appointee in the Obama
30 administration, I was part of the Commerce family, as PTO is. I was

1 with the Economic Development Administration. So I'm thrilled to
2 actually be able to bring my two worlds together.

3 I want to start by pointing out that Black and Latino
4 communities lead national adoptions of cryptocurrency by double
5 digits. We are not late adopters to crypto. We are the earliest
6 adopters to crypto. Quite frankly, we are the nerve center of
7 adoption. We have been part of crypto from the beginning, I would
8 argue, since that white paper went to the cryptography listserv in
9 2008, and then when bitcoin was first minted in 2019.

10 I say this because this is important. Oftentimes, Black and
11 Latino cultures are eclipsed or erased from the history of the
12 things that they created, and we want to make sure that that is not
13 the case in crypto.

14 So there's a lot of talk about privacy within the blockchain
15 and cryptocurrency space, and a lot of people feel privacy is the
16 game changer. I disagree. I think ownership is the game changer.
17 That is the power of decentralization. It expands access. And NFTs
18 are a great example of that. So non-fungible tokens, what are they?
19 There's a lot of hype out there. I have to tell you, I could care
20 less what celebrities and athletes and big companies are doing.

21 For the communities I represent, for too long, creators,
22 artists-- they could not protect their intellectual property, let
23 alone monetize it. They were pariahs to big entities stealing the
24 intellectual property. So decentralization, blockchain technology,
25 small contracts, has facilitated the possibility for NFTs. So now
26 everyday artists - and I'm talking about the high school students,
27 those folks on your block, the everyday creators, the ones who fuel
28 America's creative industries - they can now protect their
29 intellectual property, monetize it, and create a marketplace.

30

1 That is a game changer. But it's even further. They can now
2 code that small contract to ensure they get paid in the secondary
3 marketplace. So they sell their art to you, they make money. You
4 sell it to somebody for triple that value, they still make value.

5 For everyday creators, that is a game changer. But there's
6 more. They also learned a new skill along the way. Along the way,
7 they had to learn, whether it be MetaMask or how to digitize their
8 art. So when we think about preparing entrepreneurs for the
9 industries of the future, we've done that through NFTs, and we've
10 done that for microenterprises, everyday people, not big
11 corporations, not big entities.

12 I will say that even though Black and Latino communities are
13 at the nerve center of adoption, we are rarely included in policy
14 conversations. And that's a problem.

15 So I want to spend my time talking about the folks PTO should
16 be talking to as they do this review. And I'm doing this because my
17 remarks are off of the record, and I want them to be included in
18 the record.

19 These early creators have applied for patents. They're
20 building projects to tackle inequities within the creative space.
21 And they are the ones who are fueling the NFT marketplace.

22 I want to start by pointing out Lady Phoenix. Lady Phoenix is
23 just this incredible creator. She actually-- when you think about
24 Christie's and other auction houses that have come into the space,
25 she actually was the first one with Christie's to actually launch
26 one of her NFTs through that process. Dynamic Black woman.

27 Now a Latina - Beatriz Ramos. She founded Dada, I believe in
28 2013, and she and her team and the artist she represents created
29 the first NFTs, way before CryptoKitties.

30 Another artist is Micah Johnson. He created Aku. I owned two
31 of his NFTs. I remember a few years ago when Black creators came

1 together so we can actually make sure his first drop was
2 successful. In seven minutes, he raised, well, he amassed \$1.7
3 million. And Aku is now on the cover of Time magazine - was on the
4 cover of Time magazine - and Micah has a movie deal. A Black artist
5 who is leading in this space.

6 Now, we have some platforms that are intended to make sure
7 that we can thrive in this space. I want to point to Black@. So if
8 you go to blackat.io, Harold Hughes is leading that project. So
9 they're creating a marketplace for creators. So people think of
10 OpenSea - think of Black@. And their URL is blackat.io.

11 There's also a creator marketplace called Blacktag,
12 Blacktag.com. Akin Adebowale leads that.

13 Now, one of my favorite folks in this space is Nathan Jones.
14 He's one of the co-founders of Royal. Royal actually makes sure
15 that entrepreneurs can collect royalties. And can they do that
16 leveraging blockchain technology. I was on a panel with Nate during
17 South by Southwest a few years ago, and he talked about his father,
18 who was a musician, who was a musician with many of these biggest
19 artists that you, you've heard of. And he talked about being young
20 and these artists coming to his home, and his father helping them
21 with their music. But he said they were still just everyday,
22 working-class people. The people who roamed in his home were making
23 millions, but his father was still not profiting. And so for him,
24 leveraging blockchain, Royal is an opportunity to make sure that
25 entrepreneurs, startups, can actually capitalize and get the
26 royalties that they deserve.

27 I want to highlight Professor Tonya Evans. She leads Advantage
28 Academy. Professor Evans is an IP attorney. She's also a nationally
29 regarded crypto expert. She has been a leading voice in terms of
30 making sure we're having this conversation about intellectual

1 property, but also to make sure that that conversation is
2 inclusive.

3 Now, I commend the U.S. Patent Office for having this
4 conversation, but I want to urge you that we need inclusive policy-
5 making, inclusive policy-making that forces entrepreneurship. Right
6 now, the current dialogue around NFTs that we're hearing from the
7 SEC and from others - about whether they're securities or
8 commodities - all of those conversations actually help to push the
9 entrepreneurs and microenterprises out because we're not
10 considering them as part of the process.

11 There are lots of IP laws on the books that we should be
12 looking to, and also, policy should have entrepreneurs as a
13 priority as we develop them. How will policy impact large
14 companies, but also, how does it impact entrepreneurs, startups and
15 creators? After all, America's economy is still driven by small
16 businesses, entrepreneurs, and microenterprises.

17 As I close, I want to note that when we debated the internet
18 in the 1990s, we didn't have conversations about inclusion,
19 accessibility, entrepreneurship. And now, as we're building the
20 decentralized economy, at the starting point of this whole Web3
21 crypto blockchain digital access space, we can have these
22 conversations.

23 But we also have to make sure we're focused on creating space
24 for Black and Latino creators, entrepreneurs to be part of the
25 policy-making conversation. Otherwise, we will create policies that
26 continue to fester long-standing inequities.

27 I want to thank you for the opportunity to add my voice. I
28 urge you to expand this conversation, hear from the Black and
29 Latino leaders, who are always building and doing dynamic things
30 and have paved the way for a lot of those who are profiting to
31 actually be successful. Thank you.

1 <DAVID GERK> Thank you very much, Ms. Mesidor, for your
2 comments and remarks today. We really appreciate them.

3 Our next speaker on the panel today is Lucinda Lewis, Ms.
4 Lewis?

5 <LUCINDA LEWIS> Hello. How is everyone today? I'm so thrilled,
6 honored, and delighted to provide my remarks. What a world we live
7 in - that an individual entrepreneur can provide comments to
8 Undersecretary Vidal. Mr. Gerk, I'm very proud to be part of this
9 process, to have a better understanding of NFTs and patents and
10 what they do for our future.

11 As I mentioned, I am an entrepreneur. I'm a creator and
12 inventor, an author, historical archivist, a technologist, a coder,
13 and above all, an automotive enthusiast. I hold copyrights,
14 trademarks, and patent applications.

15 I have an unusual background. I grew up in a small aircraft in
16 the mountains of West Virginia. My father was an attorney, and he
17 needed to get to the courthouses, and the two-lane roads were not
18 conducive to travel, so I was taken out of school to help with the
19 maps and the radios as a child. It was an exciting time. We
20 sometimes flew to Cape Canaveral and watched the launches. It
21 really changed my mind in ways that I could not foresee as a child.

22 But when I graduated from college and was accepted to law
23 school and declined the opportunity, my grandmother stepped in and
24 grew a fit. She was a very powerful force of nature, and she said
25 that if I wanted to become an artist and create in photographs or
26 film, that I had to register all of my copyrights. So I kept my
27 promise to my grandmother, and I have been registering IP for many
28 years.

29 It was a painful process in the beginning, but suddenly when
30 blockchain erupted into the world, I realized that this is why I've

1 been doing it all these years. So I've been experimenting with
2 blockchain recently, and I want to show you some of the results.

3 There is no doubt we are in a renaissance. When we look back
4 at this historical period of the Renaissance era, we can see the
5 important role that Leonardo da Vinci's notebook was in providing
6 provenance surrounding his work.

7 We can also understand the importance of the invention of the
8 camera obscura to the realistic work of the painter Vermeer. And I
9 believe that the tools, that NFTs and blockchains have unleashed
10 are incredibly powerful for the future.

11 In my particular case, I've been experimenting with NFTs as a
12 way to educate about my favorite subject, automobiles. The NFT that
13 I'm going to show you contains IP providing provenance about the
14 artwork depicted in the blockchain.

15 My work deeply involves metadata and proof of provenance tied
16 to rare artwork or architectural artifacts inspired by the
17 automobile, like diners, drive-ins, Route 66, etc. For another
18 example, is my metadata can show what a particular color a car, a
19 rare car was, at a particular point in time for future collectors.

20 Using the Copyright Registry, I was able to, in effect,
21 provide a notarization of historical artifacts through copyright
22 registration. Now I can turn around and hash this data in the
23 blockchain.

24 So for me, intellectual property is what is contained in the
25 IP. It's very much a powerful tool for young creators. We need to
26 better educate them on what they need to do to protect themselves.
27 How they can show their asset ownership, what the object looked
28 like, tell the story about it, provide binding terms of service,
29 and human-readable contracts.

1 NFTs in a way are automobiles on four wheels. I'm going to try
2 to flip my screen here and see if I can show you what I've got.
3 Let's see. Are you able to see this now?

4 <DAVID GERK> Yes, we can see it.

5 <LUCINDA LEWIS> Okay. So what I'm suggesting is a very simple
6 step - an artist creates, he registers his copyright, he expresses
7 the license, he attributes the credit, mints the NFT, and persists
8 knowledge. That is the key that we need to do. Patents that pull
9 upon NFTs will then be able to read the underlying data.

10 This is one I made last night. It's an NFT about a 1908 Model
11 T. What is it? Well, it's piece of artwork, it's data, it's
12 attributions, it's permissions, and it's assertions that are now
13 persisted through the blockchain.

14 An NFT is not just art. Much of the value lies in its data.
15 It's important that it be verifiable and authenticated data. This
16 is where the real value comes.

17 This is an interface that shows you how I made this last
18 night. On the right side is the artwork and the story about it. As
19 you can see, I was using one of the modern tools, ManifoldVault. On
20 the left side is the data that I provided into the blockchain.

21 How did I do this? I wrote properties. I wrote properties that
22 asserted the artist, the title of the collection, the name of the
23 collection, the type of vehicle--you can configure this as you
24 will, my trademark, my copyright notice, a digital Identifier, a
25 form of verified identity, the type of license I was issuing, and a
26 link that one could read the full license.

27 This is an opportunity of what we could help evolve through
28 cooperation between the Trademark, Copyright, and Patent Office.

29 Now, we're looking at the real JSON from last night's NFT.
30 Here we see the attribute pointing to a verified identifier. Here
31 we see the trademark notice in the blockchain, the copyright

1 notice, the verified identifier, the license type, and a link to a
2 written terms of service published on Arweave, a competitor to
3 IPFS, but I've chosen to work with for specific reasons.

4 So I'm suggesting that we help drive education through the
5 resources we already have in our government, the Copyright Office,
6 and the U.S. Patent and Trade Office, to educate creators on how
7 they can express their IP, and smart contracts, and specifically
8 through properties using verified identifiers.

9 Someone touched on this earlier. we need Identifiers. The
10 Transportation Department needs Identifiers. That's part of our
11 problem now with the transportation industry. But we can validate
12 copyright, trademark, and licenses through a lot of the tools we
13 already have.

14 For example, here is a screenshot of a Library of Congress
15 catalog lookup. As you can see, there's a registration number. Is
16 there some way we can tie in identifiers straight to that and
17 record it in our electronic Copyright Office records? I think there
18 may be. I would like to engage the audience in a way that we can do
19 this as an opportunity to educate and inform the future. Thank you
20 again. I really appreciate this opportunity.

21 <DAVID GERK> Thank you very much, Ms. Lewis, for those
22 comments and remarks and those examples. Our next speaker today is
23 Patricia MacKenzie.

24 <PATRICIA MACKENZIE> Hi. I'm an artist. I create AI. My recent
25 work is focused on a model I made, a portable neural network where
26 I unexpectedly found that the map that emerges is a harmonic
27 oscillator with discrete energy states that's important for quantum
28 computing AI.

29 I would like to illustrate some select challenges posed by
30 NFTs through a performance piece that began in December 2021 called
31 NFT Extreme Features, wherein I attended public and private events

1 in the NFT space and asked, how would I create an NFT that would
2 not be available for sale until 2168?

3 The artist statement for this piece is as follows - My entire
4 body of work remains deemed unethical or unsafe AI until 2168 by
5 the elite offshore government. Global enforcement of laws by elite
6 offshore states predominantly occurs through warfare, meaning the
7 destruction rather than creation of value. Censorship, AI, and more
8 generally, mental warfare, is grounded in fear and reward-based
9 learning or classical conditioning. The insight into learning and
10 memory provided by the very first recording of long-term
11 potentiation in rabbits by Lømo and Bliss remains true, including
12 the hypothesis that fear-conditioned LTP could not be replicated in
13 a competing lab due to the fear context being far less terrifying
14 than mental warfare instantiated by hostile forces.

15 Mental warfare is a Machiavellian black hole. My role as an
16 artist is to transform the energy expelled from a black hole into
17 beauty, breathing life into the harmony of the universe, breathing
18 new life out into the cosmos.

19 A preliminary challenge I face with this piece is
20 communication with protocols and exchanges primarily occurs in
21 centralized spaces like Twitter and Telegram. Quantification and
22 determination of the origin of mental warfare and even
23 differentiating bot armies from human users on Twitter is beyond
24 the current capabilities of AI.

25 I watched another founder make topics trend on Twitter and
26 censor post stories in real time for the first time in 2017, and
27 would be happy to provide more in-depth analysis, including
28 blockchain-specific variants of this technology, many of which are
29 illustrated in the FTX bankruptcy saga, U.S. versus SPFF, and will
30 be explored further in my comments.

1 The Art of War is generally defined as postmodern art or
2 institutional critique as a satirical form of art, like Warhol's
3 repeating silk screens of Marilyn or Andy Warhol Foundation for the
4 Visual Arts v. Goldsmith. Reimagining Web3 as Yuga Labs Inc. v.
5 Ryder Ripps it all.

6 NFTs are assigned a UID that is unique in the context of a
7 trademark and by design is amenable to art that blurs the line
8 between substantiative difference and substantiative differences
9 that form a trademark style.

10 In contrast, nascent art movements forming after postmodern
11 art blur the line between patents and copyright. New movements seek
12 to create eternal works using \$0 in institutional waste.

13 I use AI to replace the resources traditionally pried by an
14 institute, resources my gender precludes me from receiving during
15 my lifetime. Notably, the original institutional dissonance is
16 predicated on the belief that women cannot own significant
17 discoveries. The formal reason provided for deeming my work
18 unethical is women will not receive equal recognition of resources
19 for 150 years. Therefore, relinquishing my IP to a man is the safe
20 option.

21 My decision to continue to create unsafe AI and broadly work
22 deemed unfundable at the brand initiative planning meeting is
23 evident in the patents I file. Integrating long durational
24 databases of art and knowledge, like published patents and the
25 Library of Congress and the blockchain, elegantly connects public
26 records of creation and destruction to an immutable record of
27 funded and unfunded work.

28 The same way I provide my physical address, I can optionally
29 provide a public encryption key or wallet address to my
30 intellectual property filings. Importantly, the ability to change
31 this address, like a second printing or a new addition, allows for

1 the creation of new technology like quantum compatible encryption
2 and identity anonymization. It disincentivizes fraud.

3 The offshore elite have chosen the U.S. as the jurisdiction
4 for this tech cycle of catastrophic failures. Institutional banks
5 like J.P. Morgan allowed patents to be used in asset costs already.
6 Like the New York Stock Exchange and USC, there is opportunity for
7 USPTO to become a digital gold standard for intellectual property.

8 Clarification in the law is needed regarding ownership and
9 what specifically is being sold. If I make an artistic ceremony for
10 quantum computing AI, it needs to be clear this artwork is distinct
11 from purchasing the quantum AI patent.

12 Towards the end of my thesis, my advisor stopped
13 distinguishing me from my AI. Being viewed as a commodity
14 indistinguishable from the art I create, is an unavoidable
15 universal aspect of being an artist.

16 Prince performing with the word slave written on his face and
17 Britney performing "I'm a Slave 4 U," eloquently expresses this
18 need for clarification. The law needs to provide a clear way to
19 indicate I'm selling a copy of a "Book of the Dead" reimagined for
20 AI originating from modern Nefertari, not modern Nefertari.

21 [Unintelligible name] also authored NFT extreme features on this
22 statement. I'm also eternally grateful for Tony [unintelligible
23 surname] early support and mentoring and all the amazing lawyers
24 who helped with my disaster mess AI prior art issues at NYU.

25 I work under elfsciences, elfsciences.com. Digital copies of
26 my work are actually not on my site currently, as any digital work
27 can be minted and sold as an NFT without my knowledge or consent,
28 which may occur on protocols I'm currently censored from on the
29 basis of AI safety.

30 Thank you for allowing me to speak and also all the amazing
31 panelists for their contribution to this discussion. I'm really

1 excited to see how brilliant lawyers and lawmakers rearranged the
2 discord between the U.S. laws and the offshore and artist laws.
3 Thank you.

4 <DAVID GERK> Thank you, Ms. MacKenzie, for your remarks today
5 and your time. Our next speaker is Merav Ozair.

6 <MERAV OZAIR> Hello. Thank you. Good afternoon and thank you
7 for having me here. I want a-- a special thanks to the USPTO for
8 inviting me, giving me an opportunity to post my thoughts about
9 NFTs and patent. Thank you for that. And I also applaud that the
10 USPTO is doing this kind of study

11 Now, A little bit about me. So I've been in this space for
12 over seven years, in the web3 - what we call today the Web3
13 metaverse - all this emerging technology, and I've been recognized
14 as one of the leading experts in this field. My background is in
15 fact finance. This is where my PhD and most of the experience. So
16 therefore the way that I also look at it is from a finance
17 regulation perspective, not just even though-- all what have been
18 mentioned here earlier by my esteemed panelists about art and
19 authentication, all that inclusivity, diversity, all that-- this is
20 probably one of the reasons why I'm so engaged with the Web3 and
21 see the opportunities there.

22 But when I'm thinking about patents and NFTs now, let's focus
23 on that, not just as an IP in general and what blockchain Web3
24 technology can bring to the world and how it can change our lives.
25 There are three interesting questions, at least in my mind, when it
26 relates to NFTs and patents.

27 One of them is-- one of the things that I'm thinking about is
28 that can and should we be patenting NFTs, meaning the technology
29 behind the NFTs. And I'm going to talk about it in a second. So
30 this is the first question.

1 The second question that is on my mind is the flip side of it,
2 which has already been addressed earlier by the other esteemed
3 panelist that was from IPwe, Ms. Pinto. We're talking about, can we
4 NFT a patent? So that's the flip side, which I'm going to talk
5 about, can and should we.

6 And the third one, which might be a little bit more
7 philosophical at the moment because we're not there yet in the
8 metaverse virtual space, etc., speaking about it, is, what if,
9 let's say I have a physical object that is, already has a patent,
10 that's in an iPhone. We know that Apple has many patents on that.
11 Now, if I'm going to create a digital twin of that to be used in
12 the virtual world, what rights - or is there even any rights - of
13 those patents within the virtual world? And this is something that
14 maybe it's too philosophical at the moment, but it's never too soon
15 to start thinking about things that may happen and think about it
16 before the fact and not after the fact.

17 So these are the three interesting questions that I have in
18 mind, and I'm going to touch on them because I know that I'm
19 limited with time, so I'm going to touch on them very quickly as
20 time permits.

21 So let's talk about the first topic, which is should you or
22 can you patent the NFT, the technology behind the NFT? I think this
23 is a very tricky question. And I know that there are some companies
24 who have received patents on the technology of NFTs. I don't want
25 to go into that because I don't want to create some kind of a
26 misinterpretation of whether I'm for a particular company or
27 something.

28 But in any event, most of the information I think - that was
29 already talked about at the beginning by panelists before - is that
30 the technology of creating an NFT is basically an open source. I
31 mean you can find it on different platforms like whether it's

1 Ethereum or Algorand and we know about smart contracts because with
2 a smart contract it's basically software, whether it's an NFT, and
3 an NFT is basically an application and it's software at the end of
4 the day, which is created with the ERC [unintelligible number],
5 smart control. But if you have Algorand, for example, you can
6 create an NFT, a basic one, even without a smart contract. So
7 there's a lot of information for open source of all kinds of
8 platforms that is already there and it's very advanced.

9 So if someone is coming and trying to ask for a patent for the
10 technology behind the NFT, I think it will be very challenging
11 because you have to go through all the open sources that are out
12 there and there are many of them.

13 When I look at Cryptokicks, the Nike, they got patents on
14 that. It can be offstream, [unintelligible] and breeding, which
15 kind of resembles the CryptoKitties by Dapper Labs. I don't know if
16 that even got a patent. So that was an open source created back on
17 the Ethereum platform.

18 And in order for any technology of someone to come with an NFT
19 that they will create some patents for that. I think that would be
20 a bit challenging for the Office to go through all these open
21 sources and look at all the advanced technology, because there is—
22 will be very, very advanced technology that is out there and
23 available and say whether whatever you're coming up with is really
24 unique and should be patented. Because I think that it should be
25 open source and remain in the open-source arena and not being
26 patented in that way because most of there it is. So that's, as for
27 - because of time - I'm just going to that when I'm talking about
28 NFT patenting and NFT technology in that regard.

29 So now, moving to the flip side of it, when we are talking
30 about NFTing a patent, as I said, IPwe and Ms. Pinto nicely talked
31 about that. Now do I believe that should or can be happen? Should

1 we do that? Yes. In my mind, in my humble opinion, every
2 certificate should be an entity, whether we're talking about real
3 estate, deed or title, whether we're talking about all of the
4 licenses that we have - a marriage license, driving license, even
5 your college degrees. So why not also patents? Because there's some
6 kind of certificate, of some sort of authentication.

7 I do believe that in the power of the blockchain technology to
8 allow for data sharing globally, in a way that is protected,
9 authenticated, trackable, traceable, transparent, and immutable. So
10 I do believe that this is something and I do that support that. So
11 it's not just patents, but every certificate, that it's going to
12 really open up and facilitate a lot of our business models that we
13 have today.

14 Again, coming from the finance perspective, now there is an
15 issue that I'm kind of playing with. If you think about
16 monetization, I'm not talking that you're going to monetize your
17 driver's license, I hope not. But let's say patents. In the case of
18 the IPwe, if they want to go the extra mile and not just
19 authenticate them, but also allow for monetization, then the
20 question becomes is, do they fall under securities law? And would
21 you actually have to be careful because now are you going to
22 functionalize them, tokenize them? How is it going to work? And
23 then there's other regulations that need to be considered and
24 thought of.

25 Now, I believe, and this is something that I've been working
26 on, is compliance. If it does fall into these securities laws, if
27 that happens, then it is possible to build in on-chain, as they
28 call it, within the smart contract, the compliance aspect. It is
29 viable and possible and when the time comes, I hope that whoever is
30 going to build this kind of platform will think about that. So
31 whoever is building this kind of platform should also think that

1 extra mile, and think ahead about these issues of securities law
2 and other compliance issues that needs to be addressed if you want
3 to monetize it and tokenize it and allow for all this. What we are
4 hoping for, creating more income and freeing up this kind of
5 business model. So these are issues, the thing that the platform
6 will decide to create that needs to take that into consideration
7 when we're thinking about this question.

8 And lastly, I know that I don't - I'm coming out of time - is
9 the philosophical questions about what happens if you digitize
10 physical objects already patented. Then that probably needs to be,
11 depends on what that digital asset is going to do within the
12 virtual world. For example, can that digital assets can, I don't
13 know, with a smart contract can get, let's say, phone calls from
14 the physical world and vice versa, something like that for example.
15 I know it's philosophical at the moment, but never too soon to
16 start thinking about where we're headed.

17 So thank you so much for giving me this opportunity and I am
18 thrilled about this technology and hope it will bring good to this
19 world. Thank you.

20 <DAVID GERK> Thank you very much, Ms. Ozair. And I think we
21 are now moving on to actually our final panelist of the day, and we
22 look forward to hearing now from Pamela Norton.

23 <PAMELA NORTON> Hello, can you hear me?

24 <DAVID GERK> Yes, we can.

25 <PAMELA NORTON> Okay, great. Again, I'd like to thank the
26 Undersecretary, Ms. Vidal, for the opportunity to present today and
27 give a little bit of context here on this first page.

28 My name is Pamela Norton. I'm the CEO and founder of Borsetta
29 Labs and TitleChain. To the right describes the vision I've had for
30 the past seven years - that you will look at what's in your wallet,
31 which will be all of your assets, whether they're business or

1 personal assets will be tokenized. This is the future. I have been
2 in technology my entire career, launching companies and being in a
3 very-- this is my fourth disruptive tech cycle. This is obviously
4 the largest that I've ever experienced.

5 When I launched Borsetta Labs I was very focused on bringing
6 back trust, transparency, and security, specifically for brands. We
7 were titling high-value assets on the blockchain. I'll go through
8 some examples of what we began doing and today now we are deploying
9 an open protocol called TitleLock. It's a digital asset registry
10 services that we are launching in Wyoming, and the vision is to
11 create an open protocol pathway to secure IP on chain for a Web3
12 economy.

13 So where we began-- we launched the very first titled NFT
14 luxury asset in 2018. The wallet experience was very much like your
15 everyday business. Here you can see the retail agreement, the asset
16 market valuation, certification, was all embedded in the
17 transaction. So from a user perspective, there was crypto happening
18 in the background, but they weren't exposed to it, right? Which is
19 the problem we still have today.

20 But this is a good example of an NFT-titled asset that was
21 transacted and the owner of this asset can now potentially put this
22 in a marketplace in the future. All the validation of, the
23 information of who, and the authentication of the asset, was
24 included in the NFT title.

25 So we made a strategic change, we've been quietly building
26 these past seven years. We knew that if we could be on the
27 development of a system on a chip, we will have 100 hyper-connected
28 devices to us in, I think, by the year 2035. And we're very
29 concerned about chips and sensors and the ownership and the IP of
30 those chips and sensors that will be embedded in our everyday life.
31 So we secured a project with the U.S. Air Force for a very

1 sophisticated AI system on a chip. And we took our patent-pending
2 process in the secret design of this chip. There were some very
3 unique things that this chip could do. All the IP was embedded in
4 this title. We had a scoring for this on the security and
5 valuation, the IP rights of the IP itself. Third-party IP was
6 embedded. And we secured it in a vault. So just think of like a
7 safety deposit box.

8 We also founded the Private AI Institute in 2020. Again, I was
9 very concerned about AI and trying to get ahead of it from a social
10 perspective, as well as control of, our ownership, IP and rights.

11 And from that, we have some new open-source software that's
12 coming out. So we're excited that some of the investments that
13 we've made in that sector have come through.

14 Unfortunately, this chip got COVID and died, so it never got
15 taped out. But the intent is this chip, in essence, could actually
16 not be fabricated in a non-friendly state and could not be reverse
17 engineered, or cloned. There's a lot of other unique things about
18 this chip.

19 So the problem we're focused on now, as I mentioned, we've
20 been really very involved in the supply chain. And what we found in
21 the supply chain was that you're sort of in the middle. You're
22 having a very hard time validating ownership and IP rights on the
23 front end.

24 So our focus is on self-sovereign identity rights and control
25 that's chained to the title, origination, the provenance of that
26 asset, and then it's locked to and what we call it - intellectual
27 capital, digital rights.

28 We've got 31 trillion of intangible assets that will be going
29 on chain. We do not have a mechanism today to extract that value of
30 those 31 trillion coming on chain today. And we have an additional
31 280 trillion in physical assets that will be coming on chain.

1 So this kind of recaps what we've all been talking about here.
2 This is really visually what I want to show is the problem we have
3 today. We have crypto assets that are disconnected from our legal
4 system, and our financial systems cannot recognize them.

5 So we've had all of this growth in the center and a bit of
6 mayhem, as you all know, with the recent fallout of the crypto
7 market, and sort of this disconnect between law and accountancy
8 today.

9 So TitleChain, we're launching TitleLock this year, which is
10 in essence, a digital asset safety deposit box. So just think of
11 your physical safety deposit box that you have in a bank will
12 actually reside in our launch location in Wyoming, and I'll get
13 into that in a minute. But it's a way for intellectual capital that
14 can now be locked and ready for the Web3.

15 What's happening today is brands don't know how to
16 participate. They're filing new trademark filings, trying to cover
17 themselves in the metaverse, and they can't figure out what to do.
18 So we believe the best thing for brands or creators or inventors is
19 to be able to lock what they currently have in creating a digital
20 asset.

21 So the way we do that is some technology that's been around
22 for quite some time called a Ricardian contract, it was developed
23 in the 90s. It is a human and machine-readable contract. It follows
24 arbitration law framework, which is recognized in 160 countries
25 around the world and it's really, in essence, this intelligent
26 bridge for us. It's a way for us to encapsulate in that contract
27 embeddable components, executable components on what you want that
28 contract to do.

29 But following the rule of law that we have today, in essence,
30 we have the compute power today to be able to have this technology
31 work which didn't work in the 90s. So now that we have this bridge,

1 we can NFT IP and create digital assets. And what we want to try to
2 help promote this year is some support on the accountancy side,
3 where companies and entities can recognize a new reporting
4 component for a company, which is called an immutable digital asset
5 Register.

6 So my vision has been, since 2017, is to create an open-source
7 protocol layer for the world, right? To be able to verify the asset
8 identity, the ownership, the valuation that's tied to it, as a
9 party's property title rights to that asset.

10 This is just very high level of our patent pending, the
11 division again, first time inventor and I can attest-- it is a very
12 difficult process, but it's one that I hope the world will be able
13 to leverage, which combines recognition for person, place, thing,
14 animals, whatever.

15 It covers the-- this asset actually exists in a new world,
16 which is called a Web3 world. And can participate in a new economy,
17 whether it's a D5 marketplace exchange. We cover title chain of
18 custody, so from birth to end of life.

19 But when you think about the sort of a title protocol at any
20 given point, you know the legal state of that asset. So is that
21 asset in escrow? Is that asset in a custodian bank, a digital asset
22 bank, is that asset being collateralized? So there's a lot of ways.
23 Is that asset being seized? Is that asset in a bankruptcy sort of
24 situation, which helps clear up a lot of the issues that we've seen
25 this past year of who owns what wallet and where.

26 So the opportunity to collaborate-- we really want to create a
27 Web3 marketplace and new economy. And we believe using a proof-of-
28 title protocol offers a regulatory pathway for us to accelerate a
29 Web3 world that's protecting intellectual capital. Because at the
30 end of the day, it's where it begins, right?

31

1 So, this year, Wyoming will be on track to be the first state
2 to offer registered digital assets. They have passed probably some
3 of the most progressive laws on blockchain and crypto, over 25,
4 maybe 30. Currently they are reviewing right now their stablecoin
5 Act, as well as a registered digital asset act. TitleChain is a
6 registered Wyoming corporation, as well as Borsetta Labs. We moved
7 all the companies here because the state was very progressive with
8 blockchain and technology.

9 So we are offering a digital asset registered agent service
10 for creators and inventors and business entities. And what that
11 means is we are focused on self-sovereign identity rights for the
12 inventor, creator, or owner.

13 We then validate that KYC, that person or entity. We create a
14 new entity or an entity is moved to the state, and that entity then
15 is a controller of the keys to those NFT assets, whether they're
16 patents, trademarks, copyrights, patent pendings, or trade secrets.
17 And we can kind of get into that in a minute.

18 So it's a way to have a legal recognition of IP assets from
19 the actual owner and controller of the asset, or the entity, or the
20 power of attorney who has rights management, if you will, for the
21 entity.

22 So, my recommendations, I obviously have a lot. We obviously
23 would love to work with-- we have delegated nodes on our network
24 and being able to demonstrate how we can create a global IP
25 registry asset for the world.

26 We are focused right now in Wyoming. We have 25 of the most
27 amazing use cases of IP from entertainers, from music, from film,
28 from some of the most innovative technology in America right now,
29 for renewable energy, to what's called atmospheric-generated water,
30 which is quite cool.

1 We have several DAOs, which, if you're not familiar with it, a
2 DAO is a decentralized organization that is recognized as a legal
3 entity. In Wyoming, I call it a digital co-op. So, just like a
4 credit union, these will be companies of the future, and we will
5 demonstrate how this new entity is actually an owner of NFT IP
6 assets and how they will be recognized.

7 I do have some recognitions around generative AI copyright. I
8 do believe we should be able to demonstrate a pathway for those
9 involved, like Patricia and others. It is a creative idea of the
10 mind, right? And so as long as that copyright, whether it's an AI
11 symbol that it has been inspired by AI, I do believe there should
12 be a pathway that those creators and inventors - from AI animation
13 and new storytelling - that are disclosed, but they should have the
14 ability to have control of those rights and distribution of that
15 asset.

16 I also have a recommendation. I know I'm running out of time
17 here, but we want to test-- we have a very interesting trade
18 secret, so similar to kind of like a non-disclosure that people
19 sign. It's a way to lock down, maybe it's a proprietary algorithm,
20 or some unique thing that an inventor, creator wants to share with
21 the Patent Office, that they would have the ability to, in an
22 encrypted way - we're doing some interesting things with
23 homomorphic encryption that Dorothy talked about - that's happening
24 this year, which, again, is revolutionary, that we can learn on
25 data that never leaves the box. It's quite fascinating.

26 So we'd like to be able to test some of those cases to help
27 people fast-track those innovative ideas in a way that is trusted
28 and secured.

29 Thank you so much. I appreciate it. I know that was, like, a
30 lot there, but happy to answer any questions.

1 <DAVID GERK> Thank you very much, Ms. Norton. And like all the
2 panelists, very enlightening remarks today, I see we were extra
3 efficient in this panel of industry representatives. So I'll
4 exercise a little bit of the discretion as moderator here.

5 And I think to the extent any of the second-round panelists
6 have another minute or two at most, that they'd like to elaborate
7 on something that was said, to the discussion. I think we have time
8 for maybe two or three of those type things. So if you'd like to do
9 that, I can call on you if you turn your camera on, and then I'll
10 give some quick closing remarks, and we'll let everyone on their
11 day.

12 Has anybody turn their camera on? Looks like, I don't know,
13 Pamela, were you going to make one other? Ms. Norton, were you
14 going to make one? Okay, you're leaving?

15 Okay. Ms. Mesidor, if you'd like to make another minute.

16 I think you're on mute still. I'm sorry.

17 <CLEVE MESIDOR> Apologies. Yes, sorry. I want to just
18 reiterate my emphasis on inclusion in the policy and rule-making
19 process and also emphasize that we need to hear from different
20 voices if we're going to create a new paradigm.

21 I do think diverse entrepreneurs are vital to the-- well,
22 across the blockchain and cryptocurrency ecosystem, whether it be
23 D5 or Web3. And so we have to make sure that as we are
24 deliberating, debating and figuring out what is the best path
25 forward, especially as it pertains to intellectual property laws
26 that have not always worked for people of color or communities that
27 have been locked out.

28 I can't emphasize enough that I do not believe we hear enough
29 from those of us in this space who can offer different
30 perspectives. Thank you for the opportunity to be here today.

1 <DAIVD GERK> Great. Thank you very much. And I see - we'll
2 take Ms. Pinto and then Ms. MacKenzie, and then we'll call it a
3 day. So we'll go with that plan. So, Ms. Pinto.

4 <LEANN PINTO> I just came back on in case there was any
5 questions. I didn't have anything else really to add right now.

6 <DAVID GERK> Actually, I'm going to ask you a question, if you
7 don't mind. And since there's one minute and you're up, maybe in
8 three or four sentences, just maybe for those who may not follow -
9 and I'll admit I don't know the technology as well as I probably
10 should - I have been following the discussion a lot, but I know in
11 your presentation you talked about where you're going to make NFTs
12 of 25 million patents. Essentially, what does that mean in four or
13 five sentences? And I know we did see from others, they talked
14 about what making an NFT. One was made last night, and we saw what
15 goes into it. Maybe just if you're willing to share, what in four
16 or five sentences, what does that really mean you're going to make
17 NFTs for 25 million patents?

18 <LEANN PINTO> Yeah, it's a reasonable question. I mean, from
19 the time when I was at IBM, I was presented with this concept, and
20 I didn't really kind of understand it either. And I'm a patent
21 lawyer.

22 So basically, what we do is we're taking the publicly
23 available data. So it's about ownership and things that are
24 immutable associated with that. So issue date, priority date,
25 expiration date, owner, assignee, all of that is what is being used
26 to initially mint the token. And that's data that it's going to
27 stay with that and it's publicly available data, right?

28 We're just getting it from Clarivate, so we know it's verified
29 because it's the best-in-class IP dataset. Our thought is that if
30 we have it already made for the owners, then they'll be more

1 comfortable with the fact of actually having it as an NFT versus
2 being willing to do it themselves.

3 I think that we need to be careful about rights associated
4 with NFTs and patent rights. They're not necessarily intertwined.
5 Having an NFT-- there's no rights that we're creating by issuance
6 or minting of the NFT. It's just taking that data and storing it in
7 one place. And that's the concept of what we're trying to do. And
8 by doing that, it opens up the market for liquidity and
9 transferability of that asset.

10 <DAVID GERK> Great. Thank you very much. And then last one. I'm
11 sorry, Miss Lewis, I think we're going to cut it off after Ms.
12 MacKenzie, if that's okay. But again, please submit comments to the
13 Federal Register Notice and obviously feel free to reach out to our
14 Office to continue the discussion. So maybe as a panelist will let
15 you have the last word here. Ms. McKenzie.

16 <PATRICIA MACKENZIE> Okay, I'll write this as a comment if I
17 have time. But I do want to point out that, as someone who works on
18 quantum computing, all the ideas in this were amazing. But it's
19 also really important to remember that most of these protocols run
20 on things like AWS, which are not necessarily things that will
21 exist in 150 years. And that's like an ongoing, really difficult
22 infrastructural problem. So just keep that into consideration.

23 Technologists like me are working as hard as we can to try to
24 solve technical challenges of having something that can exist and
25 be stored. Because blockchain, again, it only stores the record of
26 the exchange. It doesn't necessarily store the work. And trying to
27 create a system where that work is stored as long as something like
28 Nefertari's tomb is an ongoing thing that we're working on that's
29 not done yet.

30 <DAVID GERK> Great. Well, again--

1 <PATRICIA NORTON> Just one thing really quick. Thank you so
2 much, Tricia, because our protocol is post-quantum proof, and I
3 completely agree with you that this is an issue. IPFS is not
4 secure. We are going to have another-- a side conversation. So
5 thank you. I really appreciate it.

6 <DAVID GERK> Well, thank you for that. Again. Thank you. So at
7 this point, we'll consider our discussions closed. Our panel
8 discussions will be closed. Just a couple of closing comments here.

9 Obviously, so much was discussed, really great discussion, so
10 we could not be more ecstatic. On behalf of, obviously, Director
11 Vidal and the USPTO's Office of Policy and International Affairs
12 and all the others putting it together, I would like to thank the
13 team behind the scenes. A lot of work, as you'd imagine, goes into
14 preparing a session like this, a meeting like that. So to the GIPA
15 and IT and audio visual teams that put in a lot of time. Also to
16 some other policy attorneys and advisors behind the scenes -
17 Courtney Stopp, Lila Feisee, and Keith Mullervy, I know, put a lot
18 of time into it.

19 And then again, I'll just close by reiterating, we very much
20 want to hear further thoughts. If this discussion has prompted you
21 to have further things you think are worth raising, please do
22 submit them in response to the Federal Register notice on February
23 3.

24 And there will be a further discussion like this with the
25 Copyright Office, so I encourage you to, of course, attend that. So
26 again, thank you so much to everyone for just an outstanding
27 discussion today, and we look forward to continuing the discussion.
28 Good afternoon.

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31