Welcome to The Michigan Opportunity, an economic development podcast featuring candid conversations with business leaders across Michigan. You'll hear firsthand accounts from Michigan business leaders and innovators about how the state is driving job growth and business investment, supporting a thriving entrepreneurial ecosystem, building vibrant communities and helping to attract and retain one of the most diverse and significant workforces in the nation.

Welcome to the Michigan Opportunity brought to you by the Michigan Economic Development Corporation. Hello, my name is Ed Clemente. I’m your host today and it’s a real pleasure, this is an organization I’ve been fascinated with since I been a little kid even. But today our guest is Damian Porcari. He's the Director of the Elijah McCoy Midwest, United States Patent and Trademark Office. Welcome to the show, Damian.

Thank you so much Ed, I'm glad to be here.
Ed Clemente 00:57
And I’ve been fascinated just because, I don’t know why, but even when I was in the legislature, patents, I think is what has made America great country historically. And why don’t you first give us the sort of 30 seconds, kind of what the patent offices for someone that never heard what it does.

Damian Porcari 01:15
Cool. Well, patents are actually described in the Constitution, Article One, Section Eight, it’s to promote science and useful arts. And that and copyrights were part of our nation when it was first built in the 1700s. And it was intended for just that it differed from England, England gave patents to by the Crown to specific Friends of the Crown. Whereas the United States developed the different system, where we gave in rights to the inventors and the authors to protect their specific invention. The founders knew that you needed to have a commercial incentive to spend money and time to create new inventions. And that’s why they developed our system. And we think we differed very greatly from Europe, continental Europe, by having these individual rights to the creators and not to people associated with the Crown.

Ed Clemente 02:18
We’re gonna get into that a little bit more down the show, but I want people also to know just the basics of it, because I think I was in again in the legislature when they announced they were going to be opening the patent office. And correct me if I’m wrong, but I thought this was the first patent office outside of Washington DC, is that correct?

Damian Porcari 02:36
Absolutely. Yeah, it was part of the law called the America Invents Act, which is coming up on our 10th anniversary, September 16. So 10 years ago, the America Invents Act did a number of things, but one of the things that it did was establish the regional offices. So we currently have four regional offices, in addition to our headquarters in Alexandria, Virginia. And so the first one, which was actually part of the AIA, and was named after a Detroit, a famous Detroit inventor Elijah J McCoy was established and the office opened about eight years ago.

Ed Clemente 03:13
Well, I was I also used to be a history teacher. So I just want you to give sort of I love Elijah
McCoy. So I’m so glad when they named it after him, because I’ve been to his couple, but he’s got an interesting story. You don’t have to go too deep dive in it. But why did you guys pick that name?

Damian Porcari  03:30
So one, Elijah J. McCoy is the son of fugitive slaves, one of the few that actually utilize the Underground Railroad here in Detroit, where they escaped into Canada. He was born in Colchester, Ontario, just across the river from Detroit, couldn’t go to school in Ontario because of his race and went to school in Scotland, became an engineer, but couldn’t find work in Ontario and eventually moved back to Detroit. The only work that he could find was in Ypsilanti for the railroad where he was an oiler on a steam engine, and had to crawl over a moving steam engine to oil the different parts and said, There’s got to be a better way and develop the self oiling steam engine and left the railroad and started making the Oilers as part of his own company. So he was actually both an engineer an inventor and an entrepreneur who made components made his own inventions. And so he had a number of inventions at the time in our office is named after Elijah J. McCoy

Ed Clemente  04:34
I want listeners to make sure they go to the Wikipedia site. It’s pretty nice read on. Let’s talk a little bit about the difference between a patent and a trademark. What is, just quickly, what do you tell people the differences?

Damian Porcari  04:46
Oh, sure. So a patent is actually either a product or a service that you sell. And so it’s an invention and it is protecting that invention for a limited period of time. Now it’s 20 years for most of our inventions. 15 years for designs, whereas a trademark is actually identifying the source of goods, that can last indefinitely. You know, so my former employer, Ford Motor Company has been around for over 100 years, that name can go on indefinitely. But the original patents that Henry Ford had for his car, they expired after 17 years, now, it’s 20 years. So the difference is, is a patent protects a thing or a service for a limited period of time. And a trademark identifies the source of that good or service indefinitely.

Ed Clemente  05:34
Okay. Yeah, I think everybody’s got ideas in their head, whether it’s Coca Cola or any of those things. Two things though, you did trigger and I will get to the second one, but you
did mention you work for Ford. But I think your story is even more interesting as an individual. You’re first generation American, too, right? [I am] You and I share a couple similar things. But where were your folks from?

**Damian Porcari 05:58**
My parents were born in a little town between Rome and Naples called Norma and they immigrated to the United States in the 50s. And I was born in 59. So I was born here in Detroit at a Salvation Army Hospital just south of the Ambassador Bridge.

**Ed Clemente 06:12**
Were you born in Booth Memorial?

**Damian Porcari 06:14**
I was born at Booth Memorial Hospital.

**Ed Clemente 06:16**
So was I [No kidding] I was I was, I didn't know that? Yeah. It's torn down. It's an empty space. It's an empty space now, not far from Fort Wayne. Yeah, yeah, no, no, I told you I point it out on my tours. So but then you also you're one of the few people I think I've interviewed so far that actually also grew up down river too, right?

**Damian Porcari 06:37**
Yeah, so in high school, my parents moved out to Southgate and I went to Southgate Schafer High School for a couple of years and graduated from Southgate Shafer.

**Ed Clemente 06:47**
Once again, that school doesn't exist either, my grade school doesn't exist either.

**Damian Porcari 06:53**
I went to Hunter Elementary, which is no longer there in that whole corner of Detroit is now turned into a bit of a park that Marathon Oil is now acquiring.
Ed Clemente  07:04
Oh yeah, okay, I know the area. So let's talk a little bit about this is the trademark thing, your even patent thing he said, 17 years? In today's modern world is 17 years, like a viable number? Should it be shorter? Because of turned over with technology? I mean, that's kind of more of a global question, I think, because you see China and all these other people competing with us.

Damian Porcari  07:29
Yeah. So it used to be 17 years now. It's 20 years. Um, you know, that's a good point. And there are debates in Congress on what the right number is, whether it should be a shorter period of time for things that change rapidly, like software or a longer period of time, for things that take forever to change, like a factory design. You know, that's a great question and something that legislators are contemplating right now. So there's two different time periods in the United States, you've got 20 years for utility patents and plant patents, and then 15 years for design patents, but that could change. And, again, I think as technology evolves, there are different factors that you can consider, and Congress can change those, those statutory periods.

Ed Clemente  08:19
is there a global protection, sort of platform for international corporations or something like that?

Damian Porcari  08:25
So, so right now, there is no such thing as a global patent. There was a treaty called the the Paris Cooperation Treaty, where you could file a patent in one country and then file in other countries based on that priority filing. Typically, you either have to file within 30 months for a PCT application, or they're also national applications where you have to file within 12. But no, there's no such thing as a global patent. And you have to enter into every country that you wish to get patent protection. Now, Europe has formed their own cooperative where you can file one European Patent and get protection in all their member states. And there are a number of other groups that exist just like that. But today, there is no global patent file one, that works everywhere. And the same is true with trademarks, you have to file in all the countries in which you're selling or using a product or a service.
And you sort of kind of were your compass that is key to this job somewhat because I thought you I thought about your resume something about the US Army and then also Ford Motor Company, right.

Yeah. So I so when I was in law school, there was a recession going on back in the 80s. And the car companies weren't hiring. And so I, like many students would go to classes taught by adjunct professors, adjunct professors are frequently people who have a full time job and then teach law on the side. I would you know, pick all the classes taught by adjuncts sit in the front row and try to be interesting to hopefully get a job and one of the classes I took was government contract law taught by Dick Tarnis, who is at the time head of the Tank Automotive Command in Warren, and he said, son, you got the Blue Book Award, which is the highest grade in the class. Are you interested in government contracting? And said, yes, sir, I am. And I got a I got an internship out of that class and eventually joined the intellectual property group with Department of Army and work there for seven years. And then the Berlin Wall came down and it was bad for the army but good for private industry and switched over to Ford Motor Company in the in the 80s.

And I know you probably I assume, did a lot of patent and trademark things for Ford Motor Company, I would guess, right?

I did. I did. I think I think the reason that I got the job at Ford initially, was the entire Intellectual Property Group was consumed by a giant lawsuit by Bob Kearns on intermittent windshield wipers. So all of the senior attorneys had spent years on that case, and we're looking to spend another couple years. And so they needed help. And so I got my job because of Bob Kearns intermittent windshield wiper.

Why Michigan, how do we get picked? I mean, it's a huge, I think it's a huge honor, I don't think a lot of people in Michigan understand why it's a big deal that it located here, and what that means, competitively somewhat to be in Michigan with all of our intellectual property lawyers, and engineers, and all those kinds of things.
So at the time, Michigan was represented by you know, John Conyers, who was head of the Judiciary Committee, and needed some, some, some economic development and a patent office was intended to spur both intellectual property thinking around the region, you know, we do a lot of outreach, both in Michigan and the other eight states that we serve, but also pull from the region from a cadre of engineers and scientists. So the thinking was, if you put a regional office in Detroit, you can get people to work for the patent office, that came from industry, specifically the automotive industry. But you can now also connect with industry, specifically the automotive industry, and, and inform people about how intellectual property can advance their business. And so it was a an incubator, a spark, a growth mechanism. So we we the PTO can grow because we get smart people from the area that are trained in a specific technology, and that we can continue that growth within the region ourselves.

Announcer 12:55
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Ed Clemente 13:12
How does somebody who’s got an idea for a patent like what is what would you tell somebody that doesn’t have Ford Motor Company behind them? You know, what, what would they, how could you control, you know, something you created?

Damian Porcari 13:25
That’s a great question. There are a number of independent inventors that have been in our region forever. And I’d say, you know, all of the original founders, from Oldsmobile to Ford, to Chrysler, to the Fisher brothers were creating in their garages 120 years ago. And so you can actually develop a business from a backyard garage, it is hard and most fail. And it is a difficult challenge to go from your back yard to a giant global enterprise. So I would look at incremental steps. But to that end, I would probably split my ideas. Is that to have my own business when I’m making things, or am I looking at creating an invention and then licensing it to someone who would? Those are two very different business strategies. So we the PTO, don’t typically advise on business strategies. There are other governmental entities like SBA and their affiliates like the SBDCs. that can give you that business advice. From an invention standpoint, PTO, Patent and Trademark Office, we
provide some we provide many services to tell you whether or not your idea’s patentable and how different it is from everyone else. So that’s where our job comes in. Is your idea unique and is it meritorious of a patent? Whether or not that patent will support your business, there are other groups like the MEDC, and others that will tell you if it’s a good idea or not, we’ll just tell you if it’s new or not.

**Ed Clemente**  15:10
Yeah, and I think you and I talked a little bit in the pre-call that we want to help start helping you promote some of the programs you guys offer, correct?

**Damian Porcari**  15:20
Yes, absolutely. So we PTO offer many classes, we have this eight-part series on path to a patent, where kind of walks you through the various steps, and we’re augmenting it to be even more thorough and more complete. We run that every, we run our basic classes every single month, and we run some of the more specialized classes multiple times per year. So that would be a first step that you that an aspiring inventor and entrepreneur might want to take. But that that I think is just part of the story. A good part is on protecting intellectual property. And then working with MEDC or the other business development groups around the state can give you the other component of how to build a business, how to identify the value of your intellectual property and how to commercialize it in some way, either yourself or through licensing.

**Ed Clemente**  16:17
You know, as we go through this, you did touch a little bit about international but have you noticed in this kind of a big, bigger, broader question, but like future trends disruptors, I mean, you’ve been in this business, most of your career, it seems like with the growth of the internet, or like things like industry 4.0. Like technology isn’t even that was kind of tied into my other question is how quickly things become either antiquated, or get leapfrogged. Sometimes, you know, with patents and things like that. Do you find that actually a better? Or do you see other challenges for people to be able to harness because how quickly technology and access with the internet, you can find out all kinds of things you never used to be able to find out? So is that accelerated your process? You think a little bit?

**Damian Porcari**  17:07
Yes, I think it’s accelerated not just how PTO looks at technology and examines things we
PTO are utilizing artificial intelligence and identifying prior our new combinations, an examination, we make all of our data, our patent examination data that's public available to the public for free. Your patents are not published for the first 18 months. But thereafter, almost all of them become public information. And they're available free to everyone. And people do some very clever things with our data. A former coworker of mine, Chris McGee, who's now a professor at MIT, has looked at patent data, and has developed a kind of predictive scale on how quickly different technologies are growing. So people are familiar with Moore's Law, he was the head of Intel and said that the computer chips would double in power every 10 years. And so he Chris McGee is doing that same kind of analysis for all the different technologies. So you could look at internal combustion engines, how quickly are they growing, versus electric motors or electric batteries? And so what that does is it says, where should you be invest your assets? If you're a business or you're an investor, you know, you can identify these technological trends and make your investments in things that you think are growing more quickly.

**Ed Clemente** 18:36

Yeah, in fact, I know we talked about him at a pre-call. And he said, you're going to get them lined up to do the podcast, I think. So anyway, he sounds very interesting. And that's actually a very interesting trend, if you can predict AI and the algorithms of how inventions are, you know, like, Is it all going electrical? Is it going hydrogen, you know, those kinds of things? Right?

**Damian Porcari** 19:00

Well, you definitely see, you don't know what's going to work. You see, what you see from the patent literature is what people are working on. And by looking at the number of inventors and the number of assignees, and where they're located. You can see the trends you can see the population of inventors are growing, the number of companies in a particular area are growing, and you can see where they're located physically.

**Ed Clemente** 19:27

So is there anything else you think that would be something that you think is going to be on the horizon that might affect your patent like a future trend? Maybe?

**Damian Porcari** 19:38

So there are a number of trends that are growing, you know, certainly in the auto space autonomy is a big growth product as well as electrification. All all forms of transportation
seem to be going electrification. But as a generic trend, artificial intelligence seems to be integrated into just about any and every product that you can think of and the PTO has seen that trend. And the big, the big issues today are, can a non-person be an inventor? Under US law, we have actually rejected a patent application for a robot invention an invention created by a robot, not an invention, not a robot, but an invention that a robot created. So under US law, we're requiring that you have to be a person. But other countries don't have that requirement. And, you know, that's that's an interesting question. What happens if robots can get patents in other countries, but not in the United States? Will that hinder our competitive nature?

Ed Clemente 20:41
Seems like we're getting closer to the singularity than we like?

Damian Porcari 20:44
Well, you know, it's it's a very interesting issue. And the connection between the law and economic growth are important.

Ed Clemente 20:51
Yeah, no, it's pretty fascinating. So quickly, we're running out of time, but I had a couple quick questions for you. I think your career has been fascinating. And what you do is even more fascinating now, I think. What career advice would you give to like, if you spoke at a commencement address or someone even mid-career say they get displaced by disruption? Right? Like, what would you tell people to kind of move their careers into if you could talk to them?

Damian Porcari 21:21
You know, at my age, first and foremost, something you're interested in, life is too short to do something you hate, you know, yes, you got to feed your family, but boy, doing something you're interested in usually means that you're better at it. What what I've done is, I've actually talked to students and say, you know, you can use intellectual property to help find a job to help suggest things you're interested in. So if you have to live in a certain city, because your family lives there, you can find all the employers there, you can see what they're working on, you can see the trends, what's going up, and what's going down. Patents and trademarks actually give you a terrific insight in business activity. And I would highly suggest, you know, looking at that, in terms of where you want to live. In terms of your interest level, you know, if you're interested in a specific thing, like my passion is
bicycles, you can find all of the people around the world that are working on the technology that you're interested in, as well as their suppliers and their partners utilizing these datasets, these Patent and Trademark datasets. And so it's available, it's free, and it's fairly easy to use. I think it's a terrific asset that's can be better utilized by people.

Ed Clemente 22:36
Yeah, and I think that kind of harkens back a little bit to your original statement of why the US created the patent as an individual opportunity. Versus like, you know, open source only when you said I, they created the constitution to do that. Because I think quite a few of the founding, you know, people of our country, they were all inventors, to a lot of them.

Damian Porcari 22:56
Well, certainly that, you know, the first director of the patent system was Thomas Jefferson. He was Secretary of State. He examined the first patents. They were issued and signed by the President of the United States, George Washington. In fact, George Washington, purchased the third patent that he signed, which was a system of was a grain elevator system that he he purchased and installed at Mount Vernon.

Ed Clemente 23:29
I think, you know, and I don't know if this is urban legend, but supposedly Abraham Lincoln created a patent here, he got stuck on an island in the Detroit River. I think it's Fighting Island on the Canadian side. But he came up with an idea how to float like barges or something how to get out of the water. And he kind of worked on it here when he was stuck. But I don't know how true it is.

Damian Porcari 23:51
Yeah, I don't know the the location but the he did obtain a patent for floating a steam engine over sand built up in rivers, yes he did.

Ed Clemente 24:05
Yeah. Well, so the last question is easiest one maybe, but you've lived in Michigan your whole life and obviously, you probably have had a great chance to sample most of the state. What do you like best about living here?
Damian Porcari 24:17
You know, it's one, thank you for asking me that. I would have to say let Lake Michigan. The entire western coast of the state is terrific. And every chance I get we head out to the west side of the state. We walked Frankfort Park just last week and you know, walked up and down both sides of Frankfort Beach and it was just spectacular.

Ed Clemente 24:41
Yeah, it is a gorgeous state. And well, anyway, I really want to thank you for taking time and I'd love to get you back on because there's a whole bunch of other questions I didn't get to.

Damian Porcari 24:51
Any time, and you know, your listeners are free to look us up and we'll be happy to talk to their groups or their businesses. And to connect more, that's our job.

Ed Clemente 25:03
Yeah, that might be following up with you with some groups. Once again, our guest was Damian Porcari, Director of the Elijah McCoy, Midwest Regional United States Patent and Trademark Office. Thanks again for doing this today, Damian.

Damian Porcari 25:15
I appreciate it, thank you for inviting me.

Announcer 25:19
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