

Understanding AI and Patent Eligibility

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[Cold Open]

Bryan McWhorter (00:03)

People have analogized AI to past revolutions like electricity and like the internet, and yet we have a patent system that has been mostly unchanged for almost 200 years. And so it's gonna be exciting to hear how that system is addressing this fundamental shift in technology.

Voiceover (00:26)

Welcome to the Knobbe Martens IP+ podcast, where we bring you engaging conversations with the people at the forefront of IP. Now let's go to the host of today's episode.

Jarom Kesler (00:40)

Welcome to this episode of Knobbe IP+. I'm Jarom Kesler. I'm here with Bryan McWhorter at the law firm of Knobbe Martens. We're the hosts of today's episode, and we'll be discussing some great topics. Can AI be patented and can AI be an inventor? Bryan, you want to introduce yourself?

Bryan McWhorter (00:59)

Yeah. Hi, I'm Bryan McWhorter. I'm a partner in the Seattle office of Knobbe Martens. And thanks for that introduction. I think this is going to be a really thought-provoking conversation.

People have analogized AI to past revolutions like electricity and like the internet, and yet we have a patent system that has been mostly unchanged for almost 200 years. And so it's going to be exciting to hear how that system is addressing this fundamental shift in technology.

Jarom Kesler (01:30)

So Bryan, starting out with that introduction, which was great, can you give us a little background on specifically patenting software? Where is the U.S., and where do other countries fall?

Bryan McWhorter (01:39)

Yeah, it's interesting. There is this blanket rule that says that software per se, software alone, can't be patented in the U.S., and that's pretty much the same in every other country. But the actual practical application of this is that once you use software to actually improve a computer, most countries will let you patent that. So the algorithms or techniques alone may not be patentable, but once you actually put it into practice, that's generally going to be a patentable subject matter.

There is a little bit of an exception though, as we'll talk about today. Even though the law says that any kind of process or system can be patented, courts have created this kind of ad hoc piecemeal exception, which was called kind of abstract idea exception. And so there's a lot of questions there as to whether software can or cannot be patented as to whether it falls into one of these judicial exceptions.

Jarom Kesler (02:35)

And those exceptions are often referred to as 101 jurisprudence, right?

Bryan McWhorter (02:39)

That's right. That's right. Even though Section 101 of the law doesn't say anything about this, courts have read that and said, "We're going to find some categories of things as outside the purview of patent law." And unfortunately, those are kind of a hodgepodge of different exceptions that courts have created over the years. And so the question on software patenting is really, "Does my software fall into one of these hodgepodge of exceptions?"

Jarom Kesler (03:06)

And in your experience, are AI inventions treated differently than software? Or what's the relationship between AI and the current software legal framework?

Bryan McWhorter (03:17)

Yeah, so technically speaking, AI shouldn't be treated any differently. The law is the law, the law hasn't changed in the last 10 or so years. And so usually it's the same question, right? Does this AI process fall into one of these categories of exceptions or not? There's a slight caveat to that, which is that AI is new technology, and so different people view it differently. This is not actually the law, but there's a general heuristic there that if you are patenting a technical solution to a technical problem, that you're generally going to not fall into one of these exceptions. And so the question becomes, is the AI that you're going to try to patent a technical solution to a technical problem? And that's a really tricky thing to hash out, and certainly different people can view the same invention differently.

And there are definitely people that are a little enamored with AI right now and that are going to be more inclined to see it as a technical solution to a technical problem. And then there are certainly skeptics and cynics who view all software as fundamentally obvious or fundamentally non-technical and tend to view those as not patentable. So I think the answer is no, it's not treated any differently, but there's this kind of sheen around AI right now that's creating a little bit of uncertainty both in front of courts and at the Patent Office.

Jarom Kesler (04:47)

So is there a type of AI invention that's likely to be more patentable than other types of AI inventions?

Bryan McWhorter (04:54)

Yeah, I think there are definitely two categories of AI invention, and I think this happens anytime you see a new kind of technology arise. And those are inventions that are fundamentally improving on AI, and then inventions that are using AI to improve a different process. So there's a lot of people out there that are recognizing the power of AI to automate things that they've been doing for a long time.

The Patent Office and courts are both fairly skeptical of that from a patenting perspective because the underlying technology is frankly the AI that has already been invented, right? If you're taking an off-the-shelf model and you are applying that to a non-technical problem, I think the tendency of courts and the Patent Office is to say, "Well, that's not really the technical solution, right? The technical solution is the AI model that someone else built." But on the other hand, look, if you're building a new AI model or if current off-the-shelf AI models are not doing it for you and you really have to modify that model in order to get what you need to get done done, that is much more likely to be viewed as a technical solution and therefore patentable.

Jarom Kesler (06:12)

Okay, so you mentioned both skeptics and those who see AI, have a sheen on the AI. And we also know there's the USPTO and then there's the Federal Circuit where patents are actually litigated. So do you see a difference between how the USPTO is viewing and allowing patents on AI versus how the Federal Circuit is upholding or looking at litigations related to AI?

Bryan McWhorter (06:40)

Yeah, I think that's a really important point, and I'm really glad you brought that up. There is absolutely a difference. The reality is that the Patent Office is a large and bureaucratic machine. They need absolute rules, right? They need consistency that they can train these examiners to implement. Courts really have not done a good job of setting up those kinds of absolute rules. Despite the fact that we have had the current law around eligibility basically stable since 2014, since the Supreme Court's *Alice* decision, there's not really been an easy way to say, "This is the bright line rule."

And there's been some frustration of that at the Patent Office. And the Patent Office, starting with Director Iancu five or six years ago, has effectively gone their own route in determining patent eligibility so that they can provide that consistency to applicants. But the problem is that courts have failed to follow that kind of executive branch philosophy. And so we now see a bifurcated system where the law around AI patenting at the Patent Office is fundamentally different than the law around patenting at the courts. And so applicants are basically playing to two different fiddlers, and they certainly need to be aware of that and need to have skilled counsel to understand what it takes to get both a patent through the Patent Office and to make sure it's enforceable when they go to the courts.

Jarom Kesler (08:07)

And so if you were to summarize a few of the pitfalls, right, if I go to the USPTO and I get an AI patent, what are the pitfalls that might come up in the Federal Circuit that I need to be recognizing, cognizant of, and trying to address before the patent issues?

Bryan McWhorter (08:23)

Yeah, so I think the basic way that you might approach this is to look at the patent manual, what they call the MPEP, which is the manual the examiners apply, and just say, "Okay, as long as I satisfy those rules, I'm going to be able to get a patent." And that's not going to be the most successful at the court level. And so what I tell applicants to do is to really focus on the story of the invention, right? Making sure you can convince a judge and a jury that you really have something inventive here, that you're not just using existing technology in a new way, but you've actually invented new technology. If you can get that story right, it goes a long way towards persuasiveness at both the Patent Office and the courts.

And then I think the other pitfall that I often see is just the requirement to actually enable others to practice. So as patent experts know, all patents have an enablement requirement. You have to teach people how to replicate your invention. And with AI, there is a tendency to hand wave, right? There's all this amazing technology that you can just use off the shelf. You can go to a foundational model provider and just use the model without really understanding how it works. And I think that's definitely a pitfall that we're going to see in the coming years. People not being specific enough about the underlying technology to really allow people to replicate it. That's something the Patent Office these days does not really examine on extensively. And so I do worry that it's a pitfall that people won't understand they've fallen into until years later when they go and try to enforce their patent.

Jarom Kesler (10:00)

So as a reminder, listeners, this is Jarom Kesler, and I'm here with Bryan McWhorter. We're both partners at Knobbe Martens. And we just talked about patenting AI. And I think now we're going to move on to who is the inventor when AI is involved? And so Bryan, what questions do you have about that?

Bryan McWhorter (10:17)

Yeah, so I think when we talk about AI and patenting, we've been talking so far about patenting AI-related inventions, but there's definitely this question looming, which is that inventors are now using AI themselves to invent things. And AI is these days, it's generative, right? We've seen a couple instances where large AI models solve unsolved math problems, right? And so we're seeing advances where you can almost get the idea that the AI is the one doing the thinking. So I want to dive in a little bit with that with you. So Jarom, why don't you just start off and tell us what does it mean legally to be an inventor? And what are the consequences if you don't get that question answered correctly?

Jarom Kesler (11:01)

Yeah, it's a great question. So at least in the U.S. and for many countries, legally an inventor has to be a natural person, meaning AI cannot be an inventor, and that's actually a legally tested case. So to be an inventor, you have to contribute to the conception of the invention. And generally speaking, when you're creating a device, we categorize two different things that might happen. One is the conception and one is the reduction to practice. The conception is what contributes to who should be involved as the inventor. And the reduction of practice means, "Hey, who's the guy that actually built this thing at the direction of the inventor?"

A person that reduces an invention to practice is not considered an inventor under U.S. law. And so we get into trouble sometimes when companies like to put inventorship as an honorary or managerial benefit when legally it has to be the person that came up with the conception. And it has to be a natural person. It can't be a machine; it can't be the AI.

Bryan McWhorter (12:05)

Yeah. And so that's interesting. You said this has been legally tested. Tell us a little bit about that.

Jarom Kesler (12:10)

Yeah. There's a case, a man named Thaler, who generated an AI invention and named only AI as the inventor. And then he tried to put forth that case through various countries' patent offices to see where he got. And in the U.S., that went all the way up to the Federal Circuit, and the Federal

Circuit in *Thaler v. Vidal* said, no, the AI cannot be the inventor. An individual must be a real human being. And many other countries have followed suit. I think maybe there's one outlier that said AI could be an inventor, but for the most part, your major jurisdictions are going to require a human inventor.

Bryan McWhorter (12:48)

And you mentioned the Federal Circuit just for those listening that may not be lawyers, that's the highest court in this case, or is this a settled issue? Could it go up further?

Jarom Kesler (12:57)

Yeah, so it's a good question. When you're going through the Patent Office, the appeal process is there is an appeal board at the Patent Office, but then that gets pushed to the Federal Circuit. And the Federal Circuit is a federal appellate court. You might hear of the Ninth Circuit or the First Circuit, and then you could push it up to the Supreme Court. So *Thaler* was not pushed up to the Supreme Court. But in terms of patent law, the Federal Circuit generally hears all patent cases. And I don't think that this particular ruling is likely to be challenged or brought before the Supreme Court. I think it's pretty clear that an inventor needs to be a human being.

Bryan McWhorter (13:34)

Okay. So we hear that AI can't be inventors by themselves, but this seems like it's a little bit of a line drawing problem, right? Inventors are going to be using AI. They're going to be prompting models to brainstorm around things. So where is the line here? How do we figure out if an AI is actually contributing to the invention or if it's just the engineer? When does the engineer become the inventor if they're using an AI system to develop technology?

Jarom Kesler (14:03)

Yeah, it's an excellent question. And it's going to be, I think, a thorny and litigated question in the future that we don't necessarily have complete clarity on today. What is clear is a human being has to be the person that comes up with the conception. So if your AI invention is solely conceived by the AI and suggested by the AI, that cannot be patented. It's just simply not patentable subject matter. Now there's obviously—AI has become this great tool. And so a lot of inventors are implementing AI. And just because they used AI in the conception and invention process, doesn't mean that the ultimate patent can't go through, that it can't be patentable.

Because there's a human involved, certainly there's some conception, some development by the human being, and that is the part that we're going to concentrate on. So there's probably going to be questions that come up during future litigations as to, well, who really conceived of what? Did the human being conceive of it or did the AI conceive of it? And I think that's going to be a litigated question.

Bryan McWhorter (15:12)

Yeah. So maybe let's just jump into that. If you're inventing and you're using AI and this is going to be a litigated question, how do you deal with that? Are you going to be downloading logs? Are you going to be keeping notes? What should companies and inventors be thinking about in order to prove that they invented this?

Jarom Kesler (15:30)

Yeah, I think you're exactly right. I definitely think you need to keep good notebooks, good track of

information. How much did the human being really contribute to it? You should keep logs on the AI, for example. If the human being is clearly putting in a lot of questions to the AI, directing the AI, telling the AI, there's lots of prompts going on, that becomes a little more clear that it's the human being that's doing the conception, and the AI is simply doing the reduction of practice. Now on the other hand, if for example, the prompt is simply, "Hey, go solve this problem," and the AI solves the problem completely on its own and there's a simple one prompt question, I think that's going to be a lot more difficult to defend as being patentable in the future.

Bryan McWhorter (16:16)

Yeah. So what happens in that situation? Let's say I'm not the inventor. I just go ask a foundation model to solve this problem and it does. How can I protect that information?

Jarom Kesler (16:27)

Yeah, it's a good question. And I think, like I just said, if literally you're just putting in a question and the AI does everything, it's going to be very difficult to patent. So perhaps you want to keep that as a trade secret. Of course, other people are going to be smart enough to probably enter that same prompt into the AI, and you may just be out of luck. It may just be impossible.

And so I think it's important to make sure that every company is cognizant that this is a potential pitfall and to keep track and make sure that the human being is actually doing the conception, that there's evidence that the human being is coming up with ideas. And if you're using an AI, that you keep track of what is being fed into the AI, how much is the AI really doing? And you've got to build a case around the fact that the human being is the inventor, is the person conceiving of the idea and the AI is simply a tool to help them reduce it to practice.

Bryan McWhorter (17:24)

Yeah. So all of these models are built by someone, right? They have the ability to generate text because they go through a training process, a build process. And so I guess I've heard the argument that if you are just asking it to solve the problem and it does, that solution came from somewhere. So is there ever an instance where the company that trained the model or built the model is somehow an inventor or somehow has rights in those outputs?

Jarom Kesler (17:52)

Usually no. Building, owning, training, or deploying general purpose AI model does not automatically make someone an inventor of every later invention or contribution the model eventually generates. The model developer could be an inventor only if they contributed to the conception of the specific claimed invention. So just creating the tool, I mean, that's like saying if I build a hammer, the person that built the hammer is now really the builder of every house that that hammer put together. Logically, it just doesn't make sense.

Bryan McWhorter (18:26)

Yeah. And so putting this information into the tool, maybe that brings up another aspect that I wanted to talk about, which is what is the relationship between the user and the model provider here? Are there risks if I'm trying to solve a problem that I want to have proprietary rights to, and I go to some public provider and I ask it to solve that? What are the risks around that as far as confidentiality and disclosure and maintaining my ability to have those proprietary rights?

Jarom Kesler (19:01)

It's a really important question. And I think the key word that you said in that question is "public". If you're using a public LLM, a public AI, that is just inherently problematic. There's potentially loss of confidentiality because you've now put it into a public AI. There's public disclosure risks, meaning you might even start a patent bar. There's ownership and licensing issues, export control, data security, right? If you go into an LLM in a different country and you're putting in information that's potentially a security risk for that country, that's a real problem.

There's also privilege and work product problems, right? If you ask the AI legal questions, that may not be privileged. And those questions and responses from the AI that you generated, the prompts, those could be producible and have been. Courts have actually found there is no inherent privilege when you're asking AI a legal question, particularly when it's a public AI. If you're going to use AI to ask these types of questions or to do inventorship, it really needs to be a secured model where you've got rights in the data that you put in and the outputs that come out, and they're not being fed into or trained into a public LLM.

Bryan McWhorter (20:11)

Right. And when you say a private model, I've heard that there are a number of different knobs here to turn. There's how the provider keeps your data safe. There's whether they can use it for training. It seems like there's a lot of complexity there as to what constitutes public or private.

Jarom Kesler (20:28)

Yeah, absolutely. But you've got to ask those questions, right? Typically when you've got AI models, they really do fall into two major categories, right? There's the public model where yes, the model is trained based on every input, every question that gets into it. It collects all the data. It may keep it, it may train itself on it. And then there is a private model. These are typically contracted out, paid for, where you've got the rights to prevent the model from being trained on your inputs. You've got the rights to the inputs and the outputs. And I haven't really seen that many where there's a crossover between those two different categories. It seems like really almost all fall into one of those two categories, the free ones or the paid ones. And you want to stay within the paid models that don't train on your data and don't collect your data and where the data is all yours.

Bryan McWhorter (21:24)

Okay. So I guess summing up the conversation, AI is not going to be an inventor. We require human inventorship. And if you're using a private model that has some good data security and you are the one in control of actually what's being developed, if you bring something together that is a technical solution that is building AI in a new way or applying it in a way that just an off-the-shelf model wouldn't do, you're likely in good shape from a patenting perspective in the U.S. Is that a fair summary?

Jarom Kesler (21:59)

I think that's a fair summary. Yep.

Bryan McWhorter (22:02)

Okay. Well, I think we are about out of time. That wraps up today's episode. A big thanks to everyone for joining us today. Be sure to visit knobbe.com to listen to or view written transcripts of this and other episodes of the Knobbe IP+ Podcast. Until next time.

Voiceover (22:22)

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