Presenting the Evidence for Patent Eligibility Reform: Part I – Consensus from Patent Law Experts (ipwatchdog.com)

Presenting the Evidence for Patent Eligibility Reform: Part I – Consensus from Patent Law Experts

-

October 7, 2022

“The value of home-grown innovation to public health, national security and economic recovery has never been clearer. Yet, here in America, the law originally intended to encourage that innovation has never been so muddled.”

Patent eligibility law in the United States is in a state of disarray that has led to inconsistent case decisions, deep uncertainty in the innovative, investment and legal communities, and unpredictable outcomes in patent prosecution and litigation. These facts have been extensively documented in multiple sources, including: the statements of all 12 active judges of the nation's only patent court, the U.S. Court of Appeals for the Federal Circuit (confirmed prior to October 2021); the findings and reports of the Executive branch across all recent Administrations; the bi-partisan conclusions of Congressional committees; a robust body of academic studies; and at least *forty* separate witness statements at the 2019 hearings on this issue before the Senate Committee on the Judiciary Subcommittee on IP, including statements from advocates that oppose Section 101 reforms.

This undeniable state of uncertainty has profoundly and negatively impacted sectors of the American innovation economy that rely on patents and clear patent laws to incentivize their work. As with the uncertainty, the deeply negative impact is well-documented through a robust body of data, empirical studies and testimonial evidence. Among other effects, the impact includes reduced investment and

reduced innovation in key fields of technology like medical diagnostics, biotechnology, software, blockchain and artificial intelligence (AI). If not soon addressed, the result will be dire consequences for the health and wellbeing of Americans and broader humanity, U.S. national security, and American jobs and competitiveness. As Senator Chris Coons (D-DE), the then-Ranking Member of the Senate Judiciary IP Subcommittee, stated in 2019, "Today, U.S. patent law discourages innovation in some of the most critical areas of technology." And as then-Chairman Senator Thom Tillis (R-NC) further stated in a 2019 hearing of the Senate Committee on the Judiciary's Subcommittee on Intellectual Property (116th Congress), "What we do on this subject will have major implications for every aspect of America's innovation economy and it will determine if the United States remains the world's leading innovator in the 21st century." Many others have echoed these sentiments.

Since those bipartisan statements, the world has faced and continues to face a global pandemic that has only underscored the critical need for innovative diagnostics, vaccines based on genetic research, and software-based tools. Despite the importance of these technologies being on full display, the United States has done nothing to remedy the legal uncertainty and its suboptimal innovation ecosystem. China, meanwhile, has continued to expand its technological capabilities and global influence. It and other key competitor countries have wisely linked their national strategic priorities to the strength of key emerging technological fields like AI, blockchain, biotechnology and personalized medicine. The value of home-grown innovation to public health, national security and economic recovery has never been clearer. Yet, here in America, the law originally intended to encourage that innovation has never been so muddled.

As summarized below, a robust body of evidence demonstrates both that current Section 101 jurisprudence has created deep legal uncertainty, and that the uncertainty is inflicting lasting harm on technological sectors that are critical to the U.S. economy, U.S. competitiveness and the public interest.

In this paper, we also address other relevant concerns about the state of patent eligibility law. Some of these relate to specific proposed changes to patent eligibility law. Another relates to the ongoing threat to U.S. competitiveness caused by China and its increasingly attractive patent system (as compared to the U.S. system).

A final point discussed explains the likely differential effects of the confused patent eligibility law on different technology areas and responds to the contention by some that there are no examples of innovation being harmed in the tech sector. Research by Professor Jonathan Barnett explores the varied effects of having a weak patent system and concludes: "Without exaggeration, the U.S. patent system stands at the precipice of abandoning any meaningful commitment to property rights in the technology markets that drive the innovation economy." That should be an alarming conclusion for anyone who cares about America's future.

I. There is Overwhelming Evidence of Uncertainty in Patent Eligibility Law

The legal uncertainty existing under the current Section 101 framework, as well as the resulting inconsistency of case decisions, has been well-documented by our nation's judges, lawmakers and users of the patent system over many years.

A. The Federal Circuit Has Repeatedly Noted the Uncertainty

Starting with the Federal Circuit, all active judges on the court (who were confirmed prior to October 2021) unanimously agree that the legal standard is uncertain, the case law is inconsistent, and further guidance is needed. As Chief Judge Moore stated:

As the nation's lone patent court, we are at a loss as to how to uniformly apply §101. All twelve active judges of this court urged the Supreme Court to grant certiorari in *Athena* to provide us with guidance regarding whether diagnostic claims are eligible for patent protection. There is very little about which all twelve of us are unanimous, especially when it comes to § 101. We were unanimous in

our unprecedented plea for guidance . . . . [W]e have struggled to consistently apply the judicially created exceptions to this broad statutory grant of eligibility, slowly creating a panel-dependent body of law and destroying the ability of American businesses to invest with predictability."

Other Federal Circuit judges, including Judge Plager in *Interval Licensing LLC v. AOL, Inc* and Judge Newman in both *American Axle* and *Athena v. Mayo*, have echoed Judge Moore's above statements.

The unanimous view of the Federal Circuit's 12 active judges (as of October 2021) is dispositive proof of the uncertainty, and that the law cannot be uniformly applied to reach consistent decisions, given the Federal Circuit's unique judicial role as the final arbiter of U.S. patent eligibility in almost all cases. These jurists, after all, are the ones whom our nation has entrusted to "decide the fate" of our innovators' efforts. As former Chief Judge Paul Michel, one of the authors of this paper, has said, "If I, as a judge with 22 years of experience deciding patent cases on the Federal Circuit's bench, cannot predict outcomes based on case law, how can we expect patent examiners, trial judges, inventors and investors to do so?"

B. The Two Other Branches of Government Acknowledge the Uncertainty

Both other branches of government have further acknowledged and documented the uncertainty inherent in current eligibility law—and in a bipartisan manner. In 2019, for example, the Solicitor General, representing the views of the United States before the Supreme Court, wrote:

[T]he Court's recent Section 101 decisions have *fostered substantial uncertainty*. . . . Although *Mayo* is the most immediate source of confusion, *the uncertainty ultimately stems from the broader framework articulated in the Court's recent Section 101 decisions* . . . . The confusion created by this Court's recent Section 101 precedents warrants review in an appropriate case.

The current Administration has likewise acknowledged the "legal uncertainties created by current U.S. patent eligibility and patentability doctrine." As the current Administration's Solicitor General recently reiterated, echoing the previous two Administrations, "the *Mayo/Alice* framework has given rise to substantial uncertainty" as well as "confusion in the lower courts." The same conclusions have been reached by USPTO Directors from every single Administration since *Bilski* was decided in 2010. *See, e.g.*, here, here and here. This includes the current Director, who testified in her confirmation hearings that "we need more clarity when it comes to patent eligibility" and that "[w]e need more clarity so that inventors will be incentivized to invent, and investors will be incentivized to invest." Together, these sources highlight the consistent and bi-partisan consensus—for over a decade in the Executive branch—that the current state of eligibility law is a serious problem that must be fixed.

That sentiment is also shared on a bipartisan basis by the members of Congress who lead the Committees responsible for fulfilling Congress' constitutional duty to establish IP laws that promote scientific and technological progress. In 2019, for example, the Senate Committee on the Judiciary Subcommittee on Intellectual Property held a series of hearings on the State of Patent Eligibility in America, at which both then-Chairman Senator Thom Tillis (R-NC) and Ranking Member Senator Chris Coons (D-DE) lamented the state of uncertainty that currently plagues U.S. eligibility law—sentiments that both Senators repeated in Senate Judiciary Committee nomination hearings in December 2021.

In his 2019 opening remarks, for instance, Chairman Tillis noted that "the *lack of predictability and certainty under the current law* will prevent the innovation ecosystem from fully realizing its innovation potential." In December 2021, Senator Tillis reiterated that "current [eligibility] jurisprudence is in shambles right now and we have to work on fixing it and providing clarity." Ranking Member Coons similarly stated in 2019 that "recent decisions of the Supreme Court over a decade have *clouded the waters* regarding exactly what types of inventions merit protection, even if these inventions are

groundbreaking, revolutionary and useful. Determining whether an invention is an abstract idea, for example, has proven to be a *truly unpredictable test* for eligibility, with many now viewing results as really turning on the luck of the draw, depending on which examiner or judge reviews them." In December 2021, Senator Coons reaffirmed, "I do think legislative reform is required in Section 101."

In a similar vein, in March 2020, the non-partisan Congressional Research Service, analyzing the Federal Circuit's actions in 2019's *Athena v. Mayo*, observed in its report, *Judges Urge Congress to Revise What Can Be Patented,* that "denial of a full-court rehearing accompanied by eight separate opinions has never occurred in the history of the Federal Circuit." The report also noted that "[t]he number of opinions in *Athena* indicates that although the judges are divided on what should be done in view of current Supreme Court precedent, they view the section 101 issue as extremely important."

Witness testimony from the 2019 Senate Judiciary IP Subcommittee hearings overwhelmingly confirms that patent owners, investors, former jurists, former USPTO Directors, IP lawyers, academics, and accused infringers alike view the law as unclear and unpredictable. At least **40 of the 45** witnesses testified that the *Mayo/Alice* framework has injected uncertainty into Section 101—including most of those who opposed reforms.

C. Leading Law Professors Have Likewise Identified the Rampant Confusion

National and international confusion and uncertainty over current U.S. patent eligibility law has also been documented over many years in academic conferences, focus groups, journal articles, and business analyses, including the following:

- Dennis Crouch, *What Level of Abstraction?*, PatentlyO (Dec. 15, 2021): " 'An abstract idea can generally be described at different levels of abstraction.' *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240 (Fed. Cir. 2016). I really have no idea what to make of this quote from

Judge Reyna's opinion, but the PTAB judges appear to love it."

- Jay P. Kesan & Runhua Wang, *Eligible Subject Matter at the Patent Office: An Empirical Study of the Influence of Alice on Patent Examiners and Patent Applicants*, 105 Minn. L. Rev. 527, 538 (2020): "Compared to the patent laws in countries that focus on industrial applicability for defining eligible subject matter, the two-step test in Alice is hardly a bright line rule that delineates what subject matter is patent-eligible and what is not. As a result, even though the four statutory categories of inventions (e.g., process, machine, manufacture, or composition of matter) recited in § 101 are clear, the 'abstract idea' exception under Alice renders the application of § 101 vague and uncertain."
- Talha Syed, *Reconstructing Patent Eligibility*, 70 Am. Univ. L. Rev. 1, 1 (Oct. 25, 2021): "Patent law's doctrine of ineligible subject matter is widely agreed to be in a bad state of repair. Even those welcoming the Supreme Court's return to express subject-matter bars have been left disoriented by the Court's pronouncements in this area. Which subject matter is ineligible, why it is ineligible, and how it might become eligible have all remained enshrouded in mystery."
- Shahrokh Falati, *Patent Eligibility of Diseases Diagnosis*, 21 N.C. J.L. & Tech. 63, 63 (Mar. 1, 2020). In *Mayo, Myriad and Alice*, the Supreme Court "has effectively redefined the scope of patent eligible subject matter by greatly expanding the scope of the judicially-created exceptions to the statutory patent eligibility laws, thereby significantly narrowing the scope of subject matter that is patent-eligible. Moreover, with this recent change, there are now two lines of Supreme Court cases that are inconsistent and contradict each other. The effect of this uncertainty has been profound, devastating the biotechnology, personalize medicine, and medical diagnostics industries in the United States."

- Runha Wang & Jay P. Kesan, *How Alice Affects Bioinformatics Patent Applications?* (Sept. 4, 2020). Conference Paper, Wiet Life Science Law Scholars Workshop 2020: “It has been difficult to define what the three categories of exclusions mean in practice, partly because the meanings of these exclusions are unclear. As a result, courts have struggled to specify legal tests to operationalize these exclusions.”
- Daniel R. Cahoy, *Patently Uncertain*, 17 Nw. J. Tech. & Intell. Prop. 1, 37 (2019): “How do we know that patentability analysis presents an uncertainty problem rather than a new choice for more narrow standards? The simplest indication that the post-*Alice* world is uncertain is that similar types of inventions are treated differently depending on how a particular court (or appellate panel) views either abstraction or additional inventive activity.”
- Jeffrey A. Lefstin, Peter S. Menell, & David O. Taylor, *Final Report of Berkeley Center for Law & Technology Section 101 Workshop: Addressing Patent Eligibility Challenges*, 33 Berkeley Tech. L.J. 555, 597 (2018): “There was consensus that a test requiring a search for an ‘inventive’ application of a natural law or physical phenomenon does not provide adequate objective guidance to patent examiners, jurists, practitioners, or the inventive community,” and that “[m]any participants viewed patent eligibility doctrine as incoherent. It lacks the clarity needed for a property-based incentive regime to function effectively.”
- Kristen Osenga, *Institutional Design for Innovation: A Radical Proposal for Addressing 101 Patent Eligible Subject Matter,* 68 Am. Univ. L. Rev. 1191, 1195 (2019): “The current chaos that is patent eligible subject matter arose largely from a series of cases decided by the Supreme Court between 2010 and 2014, followed by aftershocks driven by the lower courts and the United States Patent and Trademark Office (Patent Office) as these institutions tried to figure out what the Supreme

Court had actually decided. This rapidly developing (or perhaps devolving depending on your perspective) jurisprudence had two destabilizing effects on patent law and on innovation more broadly. First, there is immense confusion about precisely what the test for patent eligible subject matter is and how it should be applied. Second, a number of previously-issued patents have been invalidated for lack of patent eligible subject matter, raising questions about the viability of extant patent rights in many important industries."

- David O. Taylor, *Amending Patent Eligibility*, 50 U.C. Davis. L. Rev. 2149, 2149 (2017): "The Supreme Court's recent treatment of the law of patent eligibility has introduced an era of confusion, lack of administrability, and, ultimately, risk of under-investment in research and development."
- *A Proposed Path Forward for Legislatively Addressing Patent Eligibility Law*, From the conference: Patenting Genes, Natural Products and Diagnostics: Current Status and Future Prospects, Held at The Banbury Center, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY (2016). This letter reports consensus that the Supreme Court's "two-part test . . . has proven to be highly subjective and arbitrary in its application." *See also* here.
- O. Taylor, *Confusing Patent Eligibility*, 84 Tenn. L. Rev. 157 (2016). "Patent law—and in particular the law governing patent eligibility—is in a state of crisis. This crisis is one of profound confusion."
- Christopher M. Holman, *Patent Eligibility Post-Myriad: A Reinvigorated Judicial Wildcard of Uncertain Effect*, 82 Geo. Wash. L. Rev. 1796, 1822 (2014). "Given the lack of clarity in the Court's patent eligibility decisions, there appears to be a strong consensus that the primary outcome of the Supreme Court's recent patent eligibility decisions has been increased confusion in the lower courts, the PTO, and the innovator community."

- John F. Duffy, *Opinion Analysis: The Uncertain Expansion of Judge-Made Exceptions to Patentability*, SCOTUSblog (June 20, 2014). “Given the Supreme Court’s explicit acknowledgment that the judge-made exclusionary principle to patentability could swallow all of patent law, one might think that the Court would be very careful, and very clear, in demarcating a limit on the doctrine so that lawyers and lower court judges would know which patents should fall, and which should survive, the analysis. Yet the Supreme Court has been remarkably resistant to providing clear guidance in this area, and this case [*Alice*] continues that trend.”

The above body of evidence demonstrates, beyond any reasonable doubt, that the state of patent eligibility law in America is in disarray. In Part II of this series, we will address evidence of the real harms this situation has caused.