IP & Antitrust

Unfair disruption
Mark A. Lemley (Stanford Law School)
Mark P. McKenna (Notre Dame Law School)

New technologies disrupt existing industries. They always have, and they probably always will. Incumbents don’t like their industries to be disrupted. And they often rely on intellectual property (IP), unfair competition, or related legal doctrines as tools to prevent disruptive entry. What that means is that many of the cases in these areas are really about whether competition from new players can force incumbents to change their business models, generally to the advantage of particular players and the detriment of others. These cases are, in an important sense, all unfair competition cases; they are about the ways in which the law permits new entrants to compete with incumbents.

Unfortunately, we lack any comprehensive way of thinking about market disruption in these settings. As a result, courts react quite differently to disruptive technology or business models in different cases. As one example, consider intellectual property (IP) cases brought against new technologies. Sometimes courts find the disruptive technology to infringe existing IP rights. New technology might fit within the legal definition of a prior invention, appropriately construed. Sometimes the technology might not itself infringe any prior invention, but makes it easier for third parties to infringe IP rights and is deemed illegal for that reason.

Other areas of law reflect similarly mixed feelings about market disruption. Business tort claims like unjust enrichment—and even nominally procompetitive laws like antitrust—are often asserted by companies with a vested interest in restricting a competitor’s new technology. We have seen similar variability in antitrust, unfair competition, and business tort cases. Antitrust and unfair competition cases are brought against incumbents that try to prevent competition, but they are also brought by incumbents upset that their markets are being disrupted. Whether those laws encourage or inhibit market disruption depends critically on what kinds of competition courts deem “unfair.”
Our goal in this paper is to address the broader question of when competition by market disruption is “unfair.” In our view, courts are often overly receptive to market disruption arguments because they tend to be concerned about upsetting the status quo and affecting the settled expectations of market players, particularly when presented with arguments that some new technology will radically alter the industry.

 Courts should intervene to prevent market disruption only when they have very good reasons—reasons connected to the fundamental policy concerns of the legal systems called upon to prevent the disruption. To achieve that goal, we must know what the legitimate ends of the asserted law are. Sometimes the legal doctrine used to prevent market disruption is one like unjust enrichment, interference with economic advantage, or unfair competition that doesn’t have a clear animating principle. We think those doctrines should be disfavored, and courts should employ them only when they are tied to some independent metric for deciding whether the defendant’s conduct is unfair or unjust. Other doctrines, like antitrust and IP, have clearer purposes. There, we can evaluate legal challenges to market disruption by testing the fit between the goals of the statute and its use in a particular case.

 Courts in many types of cases have recognized this problem and begun to develop tools for dealing with them. But IP law has lagged behind, rarely even recognizing that what seem to be cases of infringement are really challenges to market disruption. We suggest a test that helps separate legitimate cases of IP infringement from cases of pure market disruption. Drawn from the antitrust injury doctrine, our test would treat market disruption as relevant to an IP case only if the disruption is traceable to the act of infringement itself. If the plaintiff would suffer the same injury from a market intervention that is not infringing, that injury cannot be evidence of IP infringement.

**IP & Licensing**

**Licensing standard essential patents: bargaining and incentives to invent**
Daniel F. Spulber (Northwestern University – Kellogg School of Management)
*Working Paper*

Inventors license Standard Essential Patents (SEPs) to producers. Inventors and producers determine royalties through bilateral bargaining. Total royalties and royalties per unit of output are lower with bargaining than with a bundled monopoly patent pool. Bargaining also implies that competing producers maximize profits without double marginalization. Incentives to invent depend on the bargaining power of inventors relative to producers. If inventors have sufficient bargaining power, expected social welfare is greater with bargaining than with a bundled monopoly patent pool. This contradicts policy predictions based on the "Cournot Effect". Downstream competition need not increase incentives to invent, reversing the "Arrow Hypothesis". The analysis shows that markets can be efficient with complementary inventions. Public policies that diminish the bargaining power of inventors decrease incentives to invent and can reduce expected social welfare.

**The new extraterritoriality: FRAND royalties, anti-suit injunctions and the global race to the bottom in disputes over standards-essential patents**
Jorge L. Contreras (University of Utah – S.J. Quinney College of Law)

While national courts have long exercised extraterritorial authority over domestic entities whose conduct abroad is prohibited in the domestic jurisdiction, national courts have recently begun to use disputes
over domestic patent rights as vehicles for shaping the global business arrangements of private parties even absent any violation of national law. This phenomenon has become particularly pronounced in the context of “fair, reasonable and non-discriminatory” (FRAND) licenses of patents that are essential to the manufacture and sale of standardized products. This essay explores the increasing extraterritorial effect of national judicial decisions on licenses for standards-essential patents, including recent instances in which courts in the U.S. and UK have sought to establish global FRAND royalty rates for parties engaged in national patent litigation. It also examines the increasing use of the anti-suit injunction, a powerful procedural tool that can enjoin parallel foreign proceedings while disputes are adjudicated in a first jurisdiction. The combination of national courts’ willingness to determine global patent licensing rates, coupled with the rising prevalence of the anti-suit injunction, threatens to cause a new “race to the bottom” among jurisdictions in this commercially significant area of the law.

**Empirical studies of patent pools**

Michael Mattioli (Indiana University Maurer School of Law)

This book chapter from the forthcoming Research Handbook on the Economics of Intellectual Property Law provides an overview of the legal and economic impact of patent pools, with a special focus on the methods scholars have used to study these institutions empirically. Patent pools are privately governed institutions that license complementary patent rights under unified agreements. Licensees of the aggregated rights typically include members of the pool (i.e., licensors), and technology manufacturers, service providers, or researchers who are not members (sometimes referred to herein as “pure licensees”).

The discussion is divided into five parts: first, sources that helped develop the historical record of patent pools; second, methods scholars have used to assess the impact of patent pools on competition and innovation; third, works that explore the relationship between patent pooling and litigation; fourth, new methods used to estimate the transaction cost savings of patent pools; and fifth, works that examine whether patent pools are useful forums for patent valuation. Because the present volume is focused on analytical methods used within empirical studies, economic and legal scholarship concerning pools that is not primarily empirical in nature (e.g., theoretical work) is discussed only to help explain the motivation for, or conclusions of, empirical studies.

**IP & Innovation**

**Patent markets and innovation in the era of big platform companies**

Robert P. Merges (University of California, Berkeley – School of Law)
Working Paper

In many industries, the arc of our contemporary economy bends towards bigness. The now-ubiquitous digital platform companies such as Amazon, Facebook, and Netflix and (in China) Baidu, Tencent, and Alibaba are the best-known examples. While some concerned onlookers propose structural remedies, our constrained antitrust law plus the logic of natural monopoly means we are likely to be living with this reality for the foreseeable future. In this setting, it is imperative that we preserve multiple sources of rivalrous innovation even as the reach of Big Platforms continues to grow. We need to carve out and preserve a niche for innovative small and medium sized companies. One way to do this is to promote and protect the secondary patent market. Sale of patents is one way small firms can remain viable in the
shadow of Big Platforms. I argue that patent markets are superior in some cases to complete acquisition of a small firm by a Big Platform company, because by selling patents a small firm survives as an independent entity. Recent patent system reforms support this pro-secondary market policy: the era of easy, extortionate patent litigation (which has been associated with the secondary patent market) is coming to a close. After these reforms, patent sales and licensing, at times backed by the threat of litigation, can and will promote small company innovation. This is crucial: if history is any guide, though Big Platforms are today young and vigorous, in the long run they will become less innovative. Preserving multiple small innovators – through the patent market and otherwise – is the best way to prepare for this long run reality.

**IP & Litigation**

**Proximate cause and patent law**
Amy L. Landers (Drexel University Thomas R. Kline School of Law)
Boston University Journal of Science & Technology Law, Forthcoming

The U.S. Supreme Court’s WesternGeco LLC v. ION Geophysical Corp. decision provides the opportunity to open a policy space for proximate cause in patent litigation. As the country’s highest Court has pushed patent law, as well as other statutory torts, in the same direction as other civil causes of action, the full adoption of proximate cause in all monetary forms of recovery appears to be inevitable. At this time, a full adoption of this complex, multidimensional requirement will allow the patent system to resolve several troubling existing problems, including the appropriate extraterritorial reach of the system. Properly implemented, proximate cause in patent law can resolve other difficulties that are explored in this article. These include accounting for the social benefits of infringing implementations, the multiple serial plaintiff problem, and the problem of patent infringement actions brought against end-user consumers as some examples. As the patent system joins other civil causes of action in implementing proximate cause, it is likely that other problems can be implemented and resolved so long as the standard is modified to account for the unique policy problems of the patent system.

**IP Law & Policy**

**The Supreme Court bar at the bar of patents**
Paul R. Gugliuzza (Boston University School of Law)
Notre Dame Law Review, Vol. 95, Forthcoming

Over the past two decades, a few dozen lawyers have come to dominate practice before the U.S. Supreme Court. By many accounts, these elite lawyers—whose clients are often among the largest corporations in the world—have spurred the Court to hear more cases that businesses care about and to decide those cases in favor of their clients. The Supreme Court’s recent case law on antitrust, arbitration, punitive damages, class actions, and more provides copious examples.

Though it is often overlooked in discussions of the emergent Supreme Court bar, patent law is another area in which the Court’s agenda has changed significantly in the past twenty years. After rarely hearing patent cases for several decades, the Court now decides three or more patent cases nearly every Term. This article presents an empirical analysis linking the Supreme Court’s increasing interest in patent law to the elite bar’s growing involvement in patent litigation. Though correlation does not prove causation,
the article relies on a novel dataset of cert. petitions in Federal Circuit patent cases to suggest that the elite bar has, in fact, contributed to the growth of the Supreme Court's patent docket. Among the article's key findings is that, in patent cases, a cert. petition filed by an elite lawyer is three times more likely to be granted than a petition filed by a lawyer outside that group. And although elite lawyers account for only 16% of cert. petitions filed in patent cases, their petitions account for a remarkable 40% of the petitions granted.

Because patent appeals are centralized in the Federal Circuit, patent law lacks the circuit splits that the law clerks who sift through cert. petitions would normally look for in recommending that the Court grant review. But the presence of elite lawyers may not be an ideal proxy for cert.-worthiness. In fact, the increasing participation of those lawyers in patent litigation could help explain why the Court’s recent patent cases, though substantial in number, mainly involve issues of jurisdiction, procedure, and statutory interpretation—not the core areas of patent law where the Court’s input would be most useful.

**Without preamble**
Mark A. Lemley (Stanford Law School)  
Working Paper  

The Federal Circuit is ignoring a significant share of the words of patent claims. That’s a bad idea as a matter of policy. It is virtually impossible to tell when the court is going to do it. And it’s inconsistent with the idea that the claims define the scope of the invention, and with how the Supreme Court thinks about claim construction and its closest analogies, statutory interpretation and construing contracts.

The culprit is a labyrinthine set of rules the Federal Circuit uses to decide whether or not to include the "preamble" to a patent claim as a part of the claim. The words of the preamble, which can sometimes amount to more than half of the whole claim, might or might not be treated as part of the invention depending on a complex of factors, including whether the claim reads as a complete sentence without it, whether the same words are used in both the preamble and the body of the claim, whether the body of the claim includes the magic word "said," whether the preamble merely claims a use, benefit, or environment for the claim, and whether the preamble "is necessary to breathe life and meaning into the claim."

In Part I I discuss the bizarre body of law around patent claim preambles and how the law got to its current confused state. In Part II I suggest that the rule serves no useful purpose, and that if and when the Supreme Court gets such a case it should and will sweep the rule away. Patent applicants should be drafting patents with that fact in mind, and the rest of us should be interpreting claims with one eye on the fact that this is a doctrine whose days are numbered.

**Lessons from the past: The Venetian Republic’s tailoring of patent protection to the characteristics of the invention**
Stefania Fusco (Notre Dame Law School)  
Working Paper  

In recent years, much discussion in patent law has revolved around granting tailored protection to provide better incentives to inventors in different industries and to increase patent quality. For example, the deliberations that led to the enactment of the Leahy-Smith America Invents Act (AIA) focused specifically on the role of the patent system in different industries as well as on modifying remedies and patent terms to reflect the needs of distinct technology sectors. Whereas in the literature there seems to be substantial agreement on the fact that tailored protection would be beneficial for the effectiveness of the patent system, there is no consensus with respect to which entity should be vested with the authority
to produce tailored patent policies, standards and rules based on the needs of the various industries. Currently, the United States Court of Appeals for the Federal Circuit and the United States Patent and Trademark Office (USPTO) are the two principal candidates for this role. Some of this debate is connected to the broader issue in legal academia of granting general regulatory authority to administrative agencies with highly specialized knowledge.

Contrary to other administrative agencies, such as the United States Environmental Protection Agency (EPA), the Securities and Exchange Commission (SEC) or the Occupational Safety and Health Administration (OSHA), Congress has never granted such authority to the USPTO; scholars have criticized this inconsistency. The strongest argument they have used to question the current status of the USPTO refers to the fact that much could be gained from the information that this agency has accumulated through years of experience working with inventors in different industries, particularly with respect to tailoring patent protection. Historically, the Venetian Republic provided tailored patent protection based on the characteristics of the invention. In that context, the entity entrusted with the power to tailor the protection granted in each case was the Senate, the issuing authority. Moreover, although the Venetian Republic enacted what is widely recognized as the first Patent Act in the world in 1474, the Venetian Senate continued its practice of granting tailored patents until the end of the Republic in 1797.

In fact, as explained by Luigi Sordelli in 1974, following the enactment of the 1474 Act, inventors could obtain protection in Venice in two ways: through the newly created statutory system or through the much older customary system of senatorial grants. Conclusive evidence that Sordelli’s view was correct is provided in a separate paper that I co-authored with Ted Sichelman and Toni Veneri, in which we shed important new light on the true origin of patent law. In this article, I focus instead on tailoring patent protection. Specifically, I use original documents from the Venetian State Archives to present a detailed account of how the Venetian Republic used its customary patent system to tailor protection to the unique characteristics of an invention. Furthermore, I provide a full analysis of what can be learned from the Venetian experience to inform the modern debate on tailoring patent protection. Until now, only two other legal scholars have conducted extensive examinations of the original Venetian patents: Ted Sichelman and Sean O’Connor. The Venetian patent system appears to have been a very successful one; it operated for more than 300 years and during the 16th century helped Venice to transform itself from being a nation of sailors to being a nation of artisans and engineers, and ultimately the center of technological development in Europe. Thus, the Venetian customary patent system offers important lessons on how tailored patent protection and higher patent quality can be achieved. An accurate description of this system is crucial to further understanding the specific steps that we should take to reach these goals today.

Patently inconsistent: state & tribal sovereign immunity in inter partes review
John P. Mixon (Senior Staff Member on the St. John’s Law Review and St. John’s University School of Law)
St. John’s Law Review, Forthcoming

In 2011, the Leahy-Smith America Invents Act was signed into law with the goal of bringing America’s patent system up to date in the 21st century. As part of that effort, the Act introduced a new post-grant proceeding known as inter partes review (“IPR”) to better ensure that issued patents were not granted erroneously. A number of patent owning state entities have since evaded IPRs by invoking the doctrine of state sovereign immunity, which allows states to avoid unwanted adjudication. Emboldened by the success of states on this front, at least one pharmaceutical company has transferred ownership rights in its patents to a Native American tribe. The tribe, in turn, has attempted to avail itself of the doctrine of tribal sovereign immunity in order to avoid post-grant review of the patents. Recently, the United States Court of Appeals for the Federal Circuit has held that, unlike states, tribes cannot avoid IPRs through
sovereign immunity claims. This Note argues that the Federal Circuit reached the correct result on tribal sovereign immunity claims and that, due to the similarities between the two doctrines, state sovereign immunity claims should likewise fail as a defense in IPRs.

Copyright Law

Copyright’s memory hole
Eric Goldman (Santa Clara University – School of Law)
Jessica M. Silbey (Northeastern University School of Law)
Brigham Young University Law Review, Forthcoming

There is growing interest in using copyright to protect the privacy and reputation of people depicted in copyrighted works. This pressure is driven by heightened concerns about privacy and reputation on the Internet, plus copyright’s plaintiff-favorable attributes compared to traditional privacy and reputation torts.

The Constitution authorizes copyright law because its exclusive rights benefit society by increasing our knowledge. Counterproductively, to advance privacy and reputation interests, copyright law is being misdeployed to suppress socially valuable works. This results in “memory holes” in society’s knowledge, analogous to those discussed in George Orwell’s dystopian novel 1984.

By referencing Constitutional considerations, the Article identifies some limited circumstances where copyright’s goals are benefited by considering privacy and reputational interests. In other circumstances, treating copyright law as a general-purpose privacy and reputation tort harms us all.

Toward the personalization of copyright law
Adi Libson (Bar-Ilan University – Faculty of Law; Van-Leer Institute)
Gideon Parchomovsky (University of Pennsylvania Law School)
University of Chicago Law Review, Vol. 86, No. 2, 2019

In this Article, we provide a blueprint for personalizing copyright law in order to reduce the deadweight loss that stems from its universal application to all users, including those who would not have paid for it. We demonstrate how big data can help identify inframarginal users, who would not pay for copyrighted content, and we explain how copyright liability and remedies should be modified in such cases.

Analogies in IP: moral rights
David A. Simon (Harvard Law School; University of Cambridge – Faculty of Law)
21 Yale Journal of Law & Technology (2019 Forthcoming)

This Article critically examines the analogies scholars use to explain the special relation between the author and her work that copyright law protects under the doctrine of moral rights. The goal of this Article is to determine “when to drop the analogy and get on with developing the” content of the relation between the author and the work.” Upon examination, that moment approaches rather quickly: none of these analogies provide any helpful framework for understanding the purported relation. At worst, they are misleading rhetorical devices used to gain support for moral rights. At best, these analogies are first attempts at describing the relation between author and her work. So I assume that analogies are valuable as starting points for thinking about the relation between the author and her work, rather than
explaining the nature of the relation. Even when viewed this way, however, the analogies raise more questions than they purport to answer. Because the analogies discussed do not explain the author-work relation, scholars must look elsewhere for arguments to support moral rights.

Copyright and geoblocking: the consequences of eliminating geoblocking
Marketa Trimble (University of Nevada, Las Vegas, William S. Boyd School of Law)
Boston University Journal of Science and Technology Law, Vol. 25, 2019

Geoblocking has become a common companion of copyrighted content on the internet; even streaming services can make streamed copyrighted content available or unavailable according to the location of their users. There are various reasons for geographical restrictions on access to content; copyright issues are not the only reasons, but territorial limitations associated with copyright are significant – and sometimes the primary – reasons for implementing geoblocking. This article reviews the current relationship between copyright and geoblocking, particularly the role attributed to geoblocking in copyright law and law of personal jurisdiction in the United States and the European Union; it considers whether geoblocking is an inevitable part of the future of copyrighted content on the internet, particularly in light of recent attempts in the European Union to eliminate geoblocking for copyrighted content; and suggests some possible consequences that might result from eliminating geoblocking within the European Union or on a global or large territorial scale.

Other IP Topics

A network theory of patentability
Laura G. Pedraza-Farina (Northwestern University School of Law)
Ryan Whalen (The University of Hong Kong – Faculty of Law)
University of Chicago Law Review, Forthcoming

Patent law is built upon a fundamental premise: only significant inventions receive patent protection while minor improvements remain in the public domain. This premise is indispensable for maintaining an optimal balance between incentivizing new innovation and providing public access to existing innovation. Despite its importance, the doctrine that performs this gate keeping role—non-obviousness—has long remained indeterminate and vague. Judicial opinions have struggled to articulate both what makes an invention significant (or non-obvious) and how to measure non-obviousness in specific cases. These difficulties are due in large part to the existence of two clashing theoretical frameworks, cognitive and economic, that have vied for prominence in justifying non-obviousness. Neither framework, however, has generated doctrinal tests that can be easily and consistently applied.

This Article draws on a novel approach—network theory—to answer both the conceptual question (what is a non-obvious invention?) and the measurement question (how do we determine non-obviousness in specific cases?). First, it shows that what is missing in current conceptual definitions of non-obviousness is an underlying theory of innovation. It then supplies this missing piece. Building upon insights from network science, we model innovation as a process of search and recombination of existing knowledge. Distant searches that combine disparate or weakly-connected portions of social and information networks tend to produce high-impact new ideas that open novel innovation trajectories. Distant searches also tend to be costly and risky. In contrast, local searches tend to result in incremental innovation that is more routine, less costly and less risky. From a network theory perspective, then, the goal of non-obviousness should be to reward, and therefore to incentivize, those risky distant searches...
and recombinations that produce the most socially significant innovations. By emphasizing factors specific to the structure of innovation—namely the risks and costs of the search and recombination process—a network approach complements and deepens current economic understandings of non-obviousness. Second, based on our network theory of innovation, we develop an empirical, algorithmic measure of patentability—what we term a patent’s “network non-obviousness score (NNOS).” We harness data from U.S. patent records to calculate the distance between the technical knowledge areas recombined in any given invention (or patent), allowing us to assign each patent a specific NNOS. We propose a doctrinal framework that incorporates an invention’s NNOS to non-obviousness determinations both at the examination phase and during patent litigation.

Our use of network science to develop a legal algorithm is a methodological innovation in law, with implications for broader debates about computational law. We illustrate how differences in algorithm design can lead to different non-obviousness outcomes, and discuss how to mitigate the negative impact of black box algorithms.

**Reliance on science in patenting**
Matt Marx (Boston University Questrom School of Business)
Aaron Fuegi (Boston University)
Working Paper

Citations from patents to other patents have frequently been employed in studies of innovation, but these citations have many limitations. By contrast, citations from patents to non-patent materials—especially scientific articles—promise to be more useful but are much more difficult to discern given that they appear in patent documents as unstructured text. We present methods for automatically linking patents to scientific papers from 1800–2018 and share the results publicly. Moreover, we characterize the performance of our algorithms and present ROC curves so that researchers can select data according to their sensitivity to false positives vs. false negatives. Our hope is that publicly-available patent citations to science fuel research on innovation, knowledge diffusion, technology commercialization, and other topics.

**Patently uncertain**
Daniel R. Cahoy (Pennsylvania State University – Mary Jean and Frank P. Smeal College of Business Administration)
Working Paper

Innovation is an inherently uncertain process. Success is typically coupled with risk and we can only hope that those with great ideas will persevere. To encourage innovation, society reduces some of the innovation risk through structures like funding systems, regulation, and of course intellectual property rights. But what happens when uncertainty strikes the legal protection devices themselves? Faced with unclear rules and increasingly speculative rewards, some innovators may simply stop playing the game.

Such uncertainty has recently been a topic of great concern in the U.S. patent system. Some believe that the suddenly unknowable nature of fundamental questions like what is patentable has had the effect of dramatically undermining legal incentives. But others question whether a crisis really exists. They point out that uncertainty can have positive effects and even be a source of strategic advantage. How can we tell good uncertainty from bad?

This article provides a novel framework for evaluating patent uncertainty that explains how complaints and complacency can exist contemporaneously. It draws on the behavioral economics literature to
provide a deeper understanding of how innovators react to unknown legal environments. Based on this analysis, the article identifies three different types of legal uncertainty: (1) investment-killing; (2) if-then; and (3) remedial uncertainty. It asserts that only the first creates a problem that must be addressed by legal reform, while the others are actually essential to a healthy innovation system. The article concludes with specific prescriptions for addressing negative uncertainty that depend on both firm and policymaker action.

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When antitrust and IP issues converge, the interplay between the two areas will significantly impact your liability and damages arguments. In addition to our consulting in competition and intellectual property, experts across the firm frequently advise on IP-related matters, including in auctions and competitive bidding, e-discovery, energy, forensics, life sciences, and transfer pricing. For more information, visit crai.com.