This newsletter contains an overview of recent publications concerning intellectual property issues. The abstracts included below are as written by the author(s) and are unedited.

IP & Antitrust

**Intellectual property and competition law**

C. Scott Hemphill (New York University School of Law)


This chapter, prepared for the Oxford Handbook of Intellectual Property Law, surveys the intersection of competition law — or antitrust law, as it is known in the United States — with intellectual property (IP). It examines whether and how IP rights alter the substantive scope of antitrust law, either by operation of statute or as a matter of economic policy. It discusses a wide variety of antitrust claims, alleging collusion, exclusion, or both, that have been raised against IP rights holders. The examples are drawn mainly from the United States, although European developments are also included where relevant. The analysis supports the conclusion that, beyond a rights holder’s core ability to assert a valid, infringed right against a rival, IP restricts antitrust law less than one might expect. Moreover, the restrictions that do exist are often subtle.

**Patent privateers and antitrust fears**

Matthew G. Sipe (Yale University – Law School)


Patent trolls are categorically demonized as threatening American innovation and industry. But whether they are a threat that antitrust law is equipped to deal with is a complex question that depends on the particular type of patent troll and activities they engage in. This Article looks specifically at privateer patent trolls: entities that acquire their patents from operating entities and assert them against other industry members. In the particular context of privateering, antitrust law is almost certainly not the proper legal solution. Privateering does raise significant issues: circumventing litigation constraints, evading licensing obligations, and raising the cost and frequency of patent assertions. Nevertheless, there are
clear doctrinal and practical roadblocks to leveraging antitrust law to police privateering activity generally, and there exist readily available alternative regimes that are more naturally suited to the task. Antitrust law’s role in governing privateering activity should instead be more narrowly guided by its unique strengths, such as limiting collusive behavior.

**Patenting elasticities**
Clark D. Asay (Brigham Young University – J. Reuben Clark Law School)  
*Southern California Law Review, Forthcoming*  

Over the last decade, a growing consensus has emerged: there are too many patents, and they are causing a host of problems. These problems include patent “trolling,” wasteful patent “wars,” and other unnecessary societal losses. In explaining this patent overabundance, some scholars have pinpointed the governmental body responsible for issuing patents, the United States Patent Office, as the main culprit. Others have blamed patent holders themselves, pointing out a number of incentives these parties have to pursue patents even in cases where doing so makes little economic sense. Overall, these analyses thus typically assume a high and relatively uniform demand for patents among inventive parties, and one that the United States Patent Office is only too willing to satisfy.

Yet this focus on excessive patenting obscures the reality that parties likely differ significantly in their demand for patents and other forms of intellectual property. In economic parlance, different inventive parties are likely to exhibit different “elasticities,” or sensitivities, in their demand for patents and other types of intellectual property. This Article uses economic principles to disaggregate intellectual property demand by highlighting a variety of factors that may affect a party’s demand for patents and other forms of intellectual property. It argues resource-constrained parties are more likely to exhibit more elastic demand for patents, meaning they are more sensitive to the costs of patenting, both in general and relative to the costs of other intellectual property forms. Hence, rising costs of patenting are more likely to lead resource-constrained parties to forego patenting and rely on alternative, cheaper forms of intellectual property protection when available. Well-capitalized parties, on the other hand, are more likely to exhibit a relatively inelastic, high demand for patents, regardless of the costs of other intellectual property types that may otherwise function as substitutes. Thus, well-capitalized parties tend to patent en masse and complement that patenting with additional intellectual property protections when available.

With this theoretical framework in place, the Article then assesses a number of recent judicial and legislative changes in patent and trade secrecy laws, including the Defend Trade Secrets Act of 2016, the America Invents Act of 2011, and several important Supreme Court patent law cases. Overall, these changes have largely weakened patent rights while strengthening other forms of intellectual property law (such as trade secrecy). Many argue the patent law changes in particular are a step in the right direction. But while these changes may have some positive effects, this Article’s analysis suggests they may have unintended consequences in suppressing resource-constrained parties’ demand for patents while having little to no effect on well-capitalized parties’ demand for patents (or other forms of intellectual property). Hence, these intellectual property changes may place resource-constrained parties at an even greater intellectual property disadvantage vis-à-vis their well-capitalized counterparts than they previously were. The Article concludes by assessing this possibility and other potential implications for intellectual property law, innovation, and the economy more generally.
Differential patent terms and the commercial capacity of innovation
Amir H. Khoury (Tel Aviv University – Buchmann Faculty of Law)
18 Tex. Intell. Prop. L.J. 373

During the past four decades much has been written, both in legal and economic literature, about the elements that should determine the scope of patent protection. While one segment of that research advances the view that patent rights (the patent breadth), in and of themselves are sufficient for attaining the optimal degree of socially-desirable patent protection, the other segment contends that the patent term (length) needs to be factored in. My research taps into this debate and emphasizes the need to discontinue the use of a single patent term for all types of patents. Specifically, I propose using a differential patent term, in which duration is contingent on the type of innovation and its underlying technology. Here, I resort to, among other things, the Strasbourg Agreement Concerning the International Patent Classification, a system of classification that can contribute towards applying the patent length factor in an efficient and relatively cheap manner.

Revisiting the role of collaboration in creating breakthrough inventions
Tian Chan (Emory University – Goizueta Business School)
Jurgen Mihm (INSEAD)
Manuel Sosa (INSEAD)
INSEAD Working Paper No. 2017/30/TOM

The empirical literature has consistently found that lone inventors significantly underperform teams in creating innovation breakthroughs; thus it has extolled teamwork’s benefits while neglecting the role of single inventors in innovation settings. We use utility and design patent data for 1985–2009 to compare the effect — on the probability of creating a breakthrough invention — of working alone versus with a team. Overall, we confirm that working alone tends to reduce the probability of achieving a breakthrough. Yet we also identify an important contingency: the disadvantage of lone inventors disappears for design innovation (i.e., the creation of new product form). A fundamental difference between design and technological invention is that design is inherently holistic. In contrast, technological inventions vary in their degree of holisticness — some technological products are quasi-holistic and others are more modular. We empirically test the effect of holisticness on breakthrough propensity, and find, first, that inventions that are more holistic do not disadvantage an inventor who works alone rather than on a team; second, this factor almost entirely explains why lone designers account for no fewer breakthroughs than do design teams. These findings uncover an important mechanism that moderates the effect of collaboration on breakthrough performance. Finally, we show that lone inventors with a large number of past collaborators significantly improve their propensity to create breakthrough innovations to the point that they outperform teams for holistic inventions. By identifying areas conducive to the success of lone inventors, our results deepen our understanding of collaboration’s role in different types of innovation.
**Benign effects of automation: new evidence from patent texts**
Katja Mann (Bonn Graduate School of Economics)
Lukas Püttmann (University of Bonn)
*Working paper*

We provide a new measure of automation based on patent texts and study its impact on employment. Classifying all 5 million U.S. patents granted between 1976 and 2014 as automation or non-automation patents, we document a rise in the share of automation patents from 25 percent to 67 percent of patents during this period. We link patents to the industries of their use and, through local industry structure, to commuting zones. According to our estimates, advances in national automation technology have a positive influence on employment in local labor markets. There is substantial heterogeneity in effects, however: Manufacturing employment declines, but this is more than compensated by service sector job growth. Commuting zones with more people working in routine occupations fare worse.

**Adjusting patent damages for nonpatent incentives**
Lisa Larrimore Ouellette (Stanford Law School)
*Texas Intellectual Property Law Journal, Forthcoming*

Nonpatent innovation policies—including direct spending on grants and procurement, innovation prizes, and R&D tax incentives—are a significant part of innovation policy in practice and are attracting growing attention from legal scholars. In some cases, innovation is most efficiently incentivized by using these policies as complements, but in others, allowing researchers to claim nonpatent incentives in addition to patent rewards results in overcompensation. There are a few potential solutions to this reward-stacking problem, including limiting the patentability of inventions that have received significant alternative rewards, or conditioning nonpatent transfers on some relinquishment of patent rights. This symposium contribution presents and evaluates an additional solution: reducing patent damages to account for the nonpatent rewards (including ex ante risk reduction) an invention has already received. Such an approach could improve not only the incentive side of innovation policy, but also the allocation side, by reducing deadweight loss while maintaining incentives to innovate. The ability of patent damages doctrine to help mediate between different bodies of innovation law is a benefit of recent proposals for patent damages reform that has thus far been overlooked.

**IP & Litigation**

**After MCM, a second look: Article I invalidation of issued patents for intellectual property still likely unconstitutional after Stern v. Marshall**
Michael Rothwell (Independent)

In March 2012, “Patents and Public Rights: The Questionable Constitutionality of Patents before Article I Tribunals After Stern v. Marshall” published in the North Carolina Journal of Law and Technology. Since the article’s publication, its arguments, or permutations of its arguments, have been incorporated into various challenges to the constitutionality of the Article I USPTO’s patent invalidation power. A number of these challenges remain pending today.
This article addresses several common counterarguments raised in opposition to the constitutional challenges. In this regard, it is intended as a reply, and argues:

I. McCormick Was Decided on Constitutional Grounds;

II. Litigants and Lower Courts Mischaracterize the Supreme Court’s Public Rights Rule of Law;

III. The Stakes Couldn’t Be Higher.

Scientific complexity and patent adjudication. The technical judges of the Unified Patent Court
Xavier Seuba (Université de Strasbourg – CEIPI)
In C. Geiger, C. Nard and X. Seuba (Eds), Intellectual Property and the Judiciary, Edward Elgar, (Forthcoming)

This chapter analyses the advantages and challenges of having technical judges in patent litigation. It introduces different experiences in comparative patent law regarding technical judges and, in particular, the presence of technically qualified judges in the Agreement on a Unified Patent Court. The inclusion of technical judges in the new European patent court is intended to enhance the quality of the system and raises institutional and systemic questions for the new court and for patent litigation in general. Technical judges of the Unified Patent Court are not mere experts that sit on the bench to clarify technical aspects. They will have equal legal standing to legal judges and will be involved in the adjudication process from beginning to end. Therefore, in addition to developing an excellent knowledge of the rules of procedure, they must acquire a sound understanding of fair trial principles and the situation of patent law in the broader legal order.

The central claiming renaissance
Andres Sawicki (University of Miami – School of Law)
Cornell Law Review, Forthcoming

The Supreme Court has recently reinvigorated the law of patentable subject matter. But beneath the eligibility headlines, a more profound shift has taken place: central claiming is reborn.

Although central claiming characterized our earliest patent system, peripheral claiming has been ascendant since the mid-1800s. The Court’s recent eligibility cases have been poorly understood because they treat claim language—the sine qua non of modern peripheral claiming—as an afterthought. This feature of the Court’s jurisprudence, however, makes better sense from a central claiming perspective. In a central claiming system, a patent’s scope is measured by reference to the contribution to the field embodied in the inventor’s work. And that is precisely what the Court’s eligibility cases do. Rather than demonstrating a disregard for core patent law principles, the Court’s opinions can accordingly be read as shifting away from peripheral and back to central claiming.

There are several payoffs from uncovering this return to central claiming. First, eligibility analyses in a peripheral claiming system are susceptible to a levels-of-abstraction problem because the claim language offers little guidance to the relationship between the invention and some underlying subject
matter of interest; central claiming ameliorates this problem because the inventor’s contribution provides a more concrete foundation for assessing that relationship. Second, the central claiming insight reveals two distinct threads in the Court’s eligibility jurisprudence—one focusing on ineligible contributions and another on implausible contributions—with distinct (though uneasy) normative foundations. Finally, more robust use of central claiming might facilitate progress on other patent law problems. I show that it could (1) provide a better approach to the exhaustion trigger, (2) improve the law of divided infringement, and (3) rehabilitate the written description requirement. These examples illustrate the potential of the central claiming renaissance.

**IP Law & Policy**

**Recent developments in patent law (Spring 2017)**
Mark A. Lemley (Stanford Law School)
Madeleine Laupheimer (Stanford Law School)
James Yoon (Stanford Law School, Students)
*Stanford Public Law Working Paper No. 2959553*

This paper summarizes the significant developments in patent law in the twelve months ending in April 2017.

**The anti-suit injunction - a transnational remedy for multi-jurisdictional SEP litigation**
Jorge L. Contreras (University of Utah – S.J. Quinney College of Law)
Michael A. Eixenberger (University of Utah – S.J. Quinney College of Law, Students)

Litigation concerning standards-essential patents (SEPs) has become increasingly global, with parallel litigation occurring over the same issues in multiple jurisdictions throughout North America, Europe and Asia. As a result, litigants have sought mechanisms to coordinate these actions both to manage costs and to avoid inconsistent and incompatible results. One little-known procedural mechanism that has long been available to manage multi-jurisdictional litigation, and which is growing in popularity in SEP disputes, is the anti-suit injunction.

An anti-suit injunction is an interlocutory remedy issued by a court in one jurisdiction which prohibits a litigant from initiating or continuing parallel litigation in another jurisdiction or jurisdictions. Anti-suit injunctions thus contain litigation costs and reduce the likelihood of inconsistent results by ensuring that issues are resolved in one jurisdiction before they are litigated elsewhere. In the standards context, anti-suit injunctions can be particularly powerful tools for prospective licensees alleging that SEP holders have failed to comply with their FRAND licensing obligations. Specifically, a court reviewing a SEP holder’s compliance with a FRAND licensing commitment may issue an anti-suit injunction to prevent the SEP holder from bringing foreign patent infringement claims (including injunctions against the sale of infringing products) until the FRAND licensing dispute has been resolved in the issuing jurisdiction.

This chapter discusses the historical development and procedural requirements for anti-suit injunctions in both the United States and Europe. It also reviews recent SEP cases in which anti-suit injunctions have
been granted, including Microsoft v. Motorola, Vringo v. ZTE and TCL v. Ericsson.

**Intellectual property channeling for digital works**  
Lucas Osborn (Campbell University Law School; University of Denver School of Law)  
*Cardozo Law Review, Forthcoming*  

Market economies are based on free competition, which can include copying. Yet intellectual property protection in the United States prohibits copying in certain circumstances to incentivize innovation and creativity. New breeds of digital works are challenging our historical application of intellectual property law. These include certain categories of software programs as well as digital manufacturing files. The problem is that these new works look deceptively like works from a previous era, and thus courts might languorously treat them as they have older works. This would be a mistake. This Article analyzes these works in terms of existing intellectual property doctrine and constructs a normative framework for channeling the works among the different intellectual property regimes and even away from intellectual property protection altogether.

**Copyright Law**

**How photographs infringe**  
Terry S. Kogen (University of Utah S.J. Quinney College of Law)  
*Vanderbilt Journal of Entertainment & Technology Law, Vol. XIX, 2017*  

Courts and commentators have lavished attention on the question of what makes a photograph original and entitled to copyright protection. Far less attention has been devoted to the issue of how photographs infringe. This is the first Article to systematically explore the different ways in which a photograph can steal intellectual property. Photographs can infringe in two ways: by replication and by imitation. A photograph infringes by replication when, without permission, a photographer points her camera directly at a copyright-protected work—a sculpture, a painting, another photograph—and clicks the shutter. A photograph can also infringe by imitation. In such cases, the plaintiff’s claim is that the infringing photograph imitates the creative expression in her own picture.

One type of photographic infringement by imitation has confounded courts, instances in which the plaintiff photographer stages a tableau before clicking the shutter—e.g., poses a person for a portrait or assembles fruit on a table for a still life—and the defendant imitates that tableau. Copyright law is clear that a photographer has a protected interest against others copying the tableau she staged for a picture. Nonetheless, many courts simply refuse to find infringement in such cases, even when the defendant admits to having imitated that tableau. Looking to the idea/expression dichotomy, these courts excise from consideration the staged tableau as the unprotected “idea” of the plaintiff’s photograph. Having cut the heart out of that image, they inevitably find the defendant’s photograph not to be infringing.

This Article argues that looking to the idea/expression dichotomy to ignore a plaintiff’s staged tableau not only renders a nullity of an entire category of protected photographs, but profoundly misunderstands where to locate a photograph’s “idea.” That idea exists not on the face of the image. Rather, it is the mental vision that a photographer hopes to capture in taking a picture. If she shares that vision with other photographers, they are free to try their hand at embodying that idea in a photograph with no fear of
infringement. Once a photographer clicks the shutter, however, the resulting image is expression —
entirely expression.
Courts and commentators have justified applying the idea/expression dichotomy to eviscerate
photographs out of a concern for protecting the scope of creativity for downstream photographers. This
Article proposes that the “thin copyright doctrine” can offer a much better approach to providing such
protection. It proposes a “silver platter” principle for determining when a photograph should be entitled
only to thin protection.

2017 postscript to digital copyright
Jessica Litman (University of Michigan Law School)
Maize Books, 2017

In this postscript, written to accompany the 2017 re-release of my book Digital Copyright under a CC-BY-ND Creative Commons License, I review what has become of the Digital Millennium Copyright Act in the past decade. I conclude that the worst threats that the law appeared to pose to access to knowledge and freedom of expression have not (yet) materialized. The tools that legacy copyright owners secured to protect their ways of doing business proved less useful to them than they had hoped. Efforts to use technological protection to prevent unauthorized uses of copyrighted works have so far failed to live up to their promise. Entertainment and software industry efforts to prevent the emergence of new digital competitors by filing infringement lawsuits against any and all upstarts decimated many promising businesses, but ended up clearing the field for Apple, Amazon, and Google to become dominant distributors of copyrighted works, much to legacy copyright owners’ chagrin. The online service provider safe harbors had been designed for a world in which the Internet would be dominated by commercially produced content, and files posted by individual consumers would be easy to find and to block. The explosive popularity of content posted by users took copyright owners by surprise. In the face of thousands and then millions of alleged infringements, both copyright owners and service providers have resorted to automated solutions that are both expensive and overinclusive. In the past several years, copyright owners have insisted that the safe harbors assign to them unreasonable copyright enforcement burden. Efforts to persuade Congress to revisit the question, though, have not so far succeeded.

Congress, the Copyright Office, and copyright lobbyists are now gearing up for another effort at comprehensive copyright revision. I expect it to take a long time, to motivate many and large campaign contributions, and to eventually produce pretty much the same sort of law that negotiated copyright revision has generated in the past. We seem to be incapable of learning from our past mistakes.

Legal issues: Abbott and Costello explain copyright law
George H. Pike (Northwestern University Pritzker School of Law)
Northwestern Public Law Research Paper No. 16-34

History and modern pop culture know Abbott and Costello for one thing: “Who’s on First”, the “patter” routine involving the nicknames of the members of a baseball team. The routine’s fame has caused it to be, “reprised, updated, alluded to and parodied innumerable times over the years.” Through 2015 and 2016 the routine was at the center of a copyright dispute over its use in the Broadway play, Hand to God. The dark comedy/drama involves a fundamentalist church’s “puppet club”, where young people use sock puppets to act out Biblical and religious stories.
The playwright and producer used an abbreviated but recognizable version of the routine and did not obtain a license or permission to use it. The heirs and successors of Abbott and Costello sued for copyright infringement. In 2015, a trial court found the use of the routine to be a "Fair Use" under Title 17, Section 107 of the Copyright Act. In October, 2016, a Federal appeals court reversed the decision, determining that the use had not been a fair use. The Court's opinion in the case of TCA Television Corp v. McCollum is being seen by some commentators as clarifying one copyright law's more complicated issues, the Fair Use Doctrine's concept of "transformative use".

**IP & Asia**

**A fake right of priority under the cross-strait agreement on intellectual property right protection and cooperation**  
Ping-Hsun Chen (National Chengchi University)  

On June 26, 2010, Taiwan and China entered into a Cross-Strait Agreement on Intellectual Property Rights Cooperation and Protection (Cross-Strait IP Agreement). This Cross-Strait IP Agreement was renowned for China's admission of a right of priority of Taiwanese patent applications or trademark applications. Under the TRIPS Agreement, China is obligated to admit a right of priority of Taiwanese applications, but it has never fulfilled such obligation. China's particular concern is that a right of priority is rooted from the Paris Convention which only allows a state to join, so by admitting a right of priority of Taiwanese applications it may admit the statehood of Taiwan. This article is intended to argue that China provides a fake right of priority and still violates its duty to the TRIPS Agreement. First, the Agreement does not recite the TRIPS Agreement or Paris Convention. Second, the signing representatives are not regular representatives for international affairs or trade affairs in both countries. Third, China has not changed its IP laws to comply with the treaty requirements while Taiwan did so. Though, China promulgates regulations regarding a right of priority claimed by Taiwanese applicants. Those regulations are only applicable to Taiwanese applicants not to Taiwanese applications filed by a non-Taiwanese entity. Last, China does not treat the ECPA as a free trade agreement.

**Other IP Topics**

**Automatic discovery of prior art: big data to the rescue of the patent system**  
Amir H. Khoury (Tel Aviv University – Buchmann Faculty of Law)  
Ron Bekkermann (University of Haifa – Graduate School of Business)  

In this research, we offer a fresh approach as to determining prior art. We do this by using Big Data methods. More specifically, we apply a model which constructs the semantic space of patents, in which all published patents and patent applications are arranged according to semantic similarities between each other. Our model provides a clear indication of how closely patents stand in relation to existing technologies, which we refer to as Near Inventions ("NI"). Our model exposes a certain level of deficiency when it comes to the disclosure, by patent applicants, of NIs. One conclusion which we draw from this approach is that there is no consistency among applicants when it comes to citing NIs. Another conclusion is that the more "densely populated" the semantic neighborhood of an invention is, the more rigorous the examination needs to be regarding its patentability.
Patents and climate change: a skeptic’s view
Ofer M. Tur-Sinai (Ono Academic College)
(Forthcoming 2018) Environmental Law

Climate change poses a major challenge to humanity. In order to deal with our rapidly changing environment, there is a need for a broad range of new technologies that could assist in mitigating or adapting to climate change. Unsurprisingly, intellectual property (“IP”) scholars and policy makers have relied extensively on patents to provide incentives for the development of climate change technologies.

This Article casts doubts over the prospect of relying on patent incentives to adequately promote innovation in this domain. It explores the manner by which patents foster innovation in a variety of settings—from upstream research to end-product development—and reveals that the patent system is far from an optimal incentive mechanism in the environmental field, and thus cannot be trusted to adequately promote the development of climate change technologies. The likely failure of patents to effectively incentivize environmental innovation stems to a large extent from the major role assigned to market demand in directing innovation under the patent system. As market demand for environmental technologies tends to underrepresent their social value, patents cannot serve as an effective mechanism in this domain.

Considering the patent system’s apparent shortcomings in the environmental field, this Article recommends looking beyond IP and increasing the use of other incentive mechanisms, including prizes and research subsidies, in order to promote the development and diffusion of climate change technologies. In addition, the analysis explores the possibility of integrating into innovation policy certain measures that may increase demand for climate change technologies and thereby enhance the effectiveness of patent incentives in this domain. Such policy tools may include, for instance, command-and-control regulation, market mechanisms such as cap-and-trade programs and carbon tax, and information dissemination to increase public awareness.

Intellectual property from outside the box: the curious case of Internet from space
Amir H Khoury (Tel Aviv University – Buchmann Faculty of Law)

A new form of the Internet-Connected Network (the Internet) is here, and the law needs to take heed. This rival functions by way of beaming free wi-fi to and from space. It aims to reach every person and location on earth. One of the first contenders in this field is the Outernet system. A fully operational Outernet will require the launch of hundreds of satellites into low Earth orbit. Each satellite, which receives data from a network of ground stations, will broadcast the Internet to phones and computers, giving billions of people across the globe free online access. Using something known as datacasting technology, the Outernet (and other systems like it) promises to broadcast the Internet around the world.

This paper looks at this exciting new medium through the intellectual property looking glass. It highlights the many benefits and the challenges that the Outernet will pose to intellectual property.
About the editor

Dr. Anne Layne-Farrar is a vice president in the Antitrust & Competition Economics Practice of CRA. She specializes in antitrust and intellectual property matters, especially where the two issues are combined. She advises clients on competition, intellectual property, regulation, and policy issues across a broad range of industries with a particular focus on high-tech and has worked with some of the largest information technology, communications, and pharmaceuticals companies in the world.

Contact

For more information about this issue of IP Literature Watch, please contact the editor:

Anne Layne-Farrar
Vice President
Chicago
+1-312-377-9238
alayne-farrar@crai.com

www.crai.com/antitrust
www.crai.com/ip

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