February 2014

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

**A brief history of FRAND**
Jorge L. Contreras (American University - Washington College of Law)
*Working Paper*

Much has been written lately about commitments that participants in standards-setting activities make to license their patents on terms that are “fair, reasonable and non-discriminatory” (FRAND). These discussions pay little attention, however, to a long series of remedial patent licensing decrees issued by federal courts from the 1940s through 1970s that outwardly resemble FRAND commitments in all but the rationale for their imposition. These early decrees shed light on questions only now re-emerging as pertinent to the FRAND debate: the meaning of the non-discrimination prong of the FRAND commitment, the degree to which courts should intervene in the determination of reasonable royalty rates, the use of arbitration as a means for resolving licensing disputes, the extent to which royalty-free licensing may be “reasonable”, the effects of a potential licensee’s refusal to accept a patent holder’s license offer, the acceptability of a patent holder’s demand for reciprocal licenses from its licensees, and means for ensuring that such commitments survive the transfer of underlying patents.

This article offers the first historical analysis of the patent licensing decrees issued from the 1940s through the 1970s in view of their relationship to FRAND commitments made in the standards-setting context. It concludes that these historical patent licensing orders are, in fact, the direct lineal predecessors of today’s FRAND commitments, and that despite their differences, the interpretation and analysis of these remedial orders by courts, enforcement agencies and private firms offer essential insight into the interpretation of FRAND commitments today.
Treating RAND commitments neutrally
Einer Elhauge (Harvard Law School)
Working Paper

This Article argues that the same legal standards should apply to RAND commitments whether they are made to standard-setting organizations or not. The arguments for concluding that RAND commitments should limit injunctive patent relief or trigger antitrust liability turn on whether the commitment reasonably induces lock-in that generates hold-up effects or market power when that commitment is breached. But RAND commitments can induce such lock-in effects when they are made outside of standard-setting organizations and do not always induce them when they are made to standard-setting organizations. Thus, any special legal rules for RAND commitments should turn on whether the commitments induced such lock-in, rather than on the institutional context. The arguments against using special legal rules for RAND commitments turn on the extent to which lock-in might fail to generate holdup problems, denying patent injunctions might generate reverse-holdup problems, and contract or promissory estoppel remedies might obviate the need for antitrust liability. But those arguments likewise apply equally inside and outside of standard-setting organizations. Thus, however one resolves the arguments for and against applying special legal rules to RAND commitments, the resulting legal standards should be the same whether or not the commitment is made to a standard-setting organization.

FRAND and other requirements in China’s announcement on releasing (provisional) administration regulations of national standards involving patents
Dan Prud’homme (Research Center for Global R&D Management)
Journal of Intellectual Property Law & Practice (Forthcoming)

New measures took effect on January 1st 2014 governing national standards involving patents in China which have noteworthy implications for businesses given they include reporting requirements that add to uncertainty and therein possibility of non-compliance; include other clearer reporting requirements that raise compliance costs; specify parameters of patent licensing, including fair, reasonable, and non-discriminatory (FRAND) terms, for voluntary national standards; allow for lack of suspension and publication of voluntary national standards even when patent licensing arrangements are not finalised; mandate patent licensing for compulsory national standards; and provide some transparency in national standards development and reporting.

A primer discussion on NPEs: from the points of antitrust challenges
Binqiang Liu (University of New Hampshire School of Law)
Working Paper

NPEs (Non Practicing Entities) and their patent trading deals are relatively new phenomena. Antitrust cases involving NPEs and related patent deals from EU and US set clear statement that NPEs and their patent trading behavior do fall under antitrust scrutiny. Due to the complexity and hard-to-trace nature of NPEs as well as the difficulty to define the effects brought to competition in related markets by NPEs' patent trading practice, antitrust investigation authorities face great challenges when dealing with NPEs. Innovative application is needed while current regulations and antitrust related laws are to be applied.
Potential acts include a clear and extended definition of entities to be investigated, a combined ex-ante and ex-post investigation mechanism, and a platform established to provide extensive information related to patents and NPEs so that the information asymmetry problem can be mitigated.

**When competition law analysis goes wrong – the Italian Pfizer/Pharmacia case**
Damien Geradin (George Mason University School of Law)
*Working Paper*  

The January 2012 decision of the Italian Competition Authority ("ICA") to fine Pfizer and Pharmacia €10.6 million is an illustration of the more aggressive trend taken by competition authorities in the pharmaceutical sector. In this case, the ICA alleges that the parties sought to delay entry of generic suppliers by implementing a “complex strategy” to “artificially” extend its patent rights, hence committing an abuse of a dominant position in breach of Article 102 of the Treaty on the Functioning of the European Union (“TFEU”).

The purpose of this paper is to show that the decision of the ICA is fundamentally flawed as it fails to provide any evidence that the parties’ patent filings were misleading or “artificial” under the applicable patent laws. Instead, the decision is based solely on the ICA’s unsubstantiated view that Pfizer’s conduct did not constitute “competition on the merits”, a vague standard unable to satisfy the basic requirements of the rule of law and legal certainty. Following this unreasoned decision, pharmaceutical companies and their counsel face an impossible task of assessing which IP strategies are compatible with competition law. This legal uncertainty, combined with the risk of large fines, means that pharmaceutical firms may no longer dare to take steps to obtain patent protection to which they are legally entitled, and more importantly, may have less incentive to invest in future research and development.

**Activating Actavis with a more complete model**
Michael G. Baumann (Economists Incorporated)  
John Payne Bigelow (Compass Lexecon)  
Barry C Harris (Economists Incorporated)  
Kevin M. Murphy (The University of Chicago)  
Janusz A. Ordover (New York University)  
Robert Willig (Princeton University)  
Matthew B. Wright (Economists Incorporated)  
*Antitrust, Forthcoming*  

In FTC v. Actavis, Inc. the Supreme Court asked whether a patent settlement agreement involving a so-called “reverse payment” from a patent holder to an alleged infringer of a pharmaceutical patent “can sometimes unreasonably diminish competition in violation of the antitrust laws.” Edlin, Hemphill, Hovenkamp, and Shapiro (2013) propose a method of evaluating the competitive effects of reverse payment settlement agreements that compares the magnitude of the reverse payment to the sum of the patent holder’s prospective litigation costs and the value of services provided by the alleged infringer to the patent holder. This paper shows that the method proposed by Edlin et al. holds only under limited conditions. This paper also identifies conditions where a reverse payment in excess of litigation costs may lead to earlier generic entry and would be procompetitive. In addition to avoided litigation costs,
relevant factors in evaluating patent settlements involving a reverse payment may include inter alia the risk-tolerance of the parties, the level of the drug’s sales, the parties’ expectations and information asymmetries related to future competition for the drug, the parties’ subjective views of the likely outcome of the litigation, the parties’ differences in time-values of money, the applicability of Hatch-Waxman first-filer exclusivity, the relative size of the alleged net reverse payment, and the extent of the alleged delay and associated diminution of competition.

**IP & Innovation**

*What do patent-based measures tell us about product commercialization? Evidence from the pharmaceutical industry*

Stefan Wagner (ESMT European School of Management and Technology)
Simon D. Wakeman (ESMT European School of Management and Technology)

*Working Paper*


Patent-based measures are frequently used as indicators in empirical research on innovation and technology as well as on firms’ strategies and organizational choices to characterize inventions or, more generally, innovative activities and the technological capabilities of organizations. A clear correlation between the value of an invention and a number of patent indicators such as the number of citations received has been established. However, there is much less evidence of what patent-based indicators tell us about outcomes beyond patent value. Using data from the pharmaceutical industry, we investigate the relationship between the most frequently used indicators and the outcomes from the product development process. Our findings draw a complex picture regarding the information content of various patent indicators that bear important implications for the use and the proper interpretation of these indicators in settings where they are employed to describe outcomes beyond the patent system itself.

**IP & Litigation**

*The near certainty of patent assertion entity victory in portfolio patent litigation*

Sinan Utku (Bilkent University - Law School)

*Journal of Technology Law & Policy, Vol. 19, 2014*


Patent assertion entity litigation is increasingly being viewed as a pathological condition of the patent system. The large damage awards and settlements that PAEs have been able to extract raise the issue of whether PAEs are particularly good at identifying high-value patents. This paper, based on previous work, argues that these are rather a function of the portfolio theory of patent value. Further, this paper shows that, under reasonable conditions applying to the current form of patent litigation in the United States, a PAE asserting a portfolio of patents having some nexus to the accused target product or product line will almost always prevail. Moreover, errors in estimating probabilities of winning on the material issues in litigation will have little or no impact on this result as the number of asserted patents increases. As a result, most reform efforts, directed to measures such as limitation of injunctions, modest restrictions on obtainable damages and modestly raising patentability thresholds, will likely have little or no impact on the PAE litigation problem.
Inventive application: a history
Jeffrey A. Lefstin (University of California - Hastings College of the Law)
Working Paper

As the Supreme Court prepares to take up yet another case on the doctrine of patent-eligible subject matter, the Court will again be called on to draw the line between unpatentable fundamental principles and patentable inventions. In Mayo v. Prometheus, the Court held that “conventional and obvious” activity cannot transform a law of nature or abstract idea into a patent-eligible invention; rather, only an “inventive application” of a fundamental principle may be patented. Both Mayo and its intellectual forebear, Parker v. Flook, anchored this doctrine in Neilson v. Harford, the famous “hot blast” case decided by the Court of Exchequer in 1841.

But an examination of the Neilson case reveals a very different story than the one told by the Supreme Court. Neilson was indeed the starting point from which 19th-century courts, both English and American, drew the boundary between discovery and invention. But the patent in Neilson was not sustained because it represented an inventive application of the patentee’s discovery. It was in fact sustained because the patentee’s application was entirely conventional and obvious. Nineteenth century English courts and commentators understood Neilson and its companion cases to teach that while discoveries in the abstract were not patentable, a practical application of a new discovery was patentable regardless of the novelty or inventiveness of the application.

The same understanding prevailed in the United States. Neilson was the starting point for the Supreme Court’s landmark 19th century decisions on patent-eligible subject matter, patent scope, and the patentability of processes. But 19th century case law did not demand inventive application. The great 19th century treatise writers addressed the question directly, and reached the same conclusion as their English counterparts: practical application of a discovery sufficed. And until 1948, the weight of American authority agreed.

It was then that Justice Douglas, in Funk Brothers v. Kalo Inoculant, first drew boundary between discovery and invention at “inventive application.” Largely forgotten today, the lower courts’ implementation of that test in the wake of Funk serves as a cautionary tale of the patents that could be invalidated in the future, if the Court maintains inventive application as the test for patent eligibility.

Does ‘public use’ mean the same thing it did last year?
Mark A. Lemley (Stanford Law School)
Working Paper

In 2011, Congress enacted the America Invents Act (AIA), the most substantial overhaul of the patent system in the past sixty years. The most significant change in the AIA was the move from a first to invent regime to a first inventor to file regime. The goal of the move to first to file, besides harmonization, is to encourage inventors to move with alacrity to share their invention with the world.
There is an ambiguity in the AIA, however, that threatens that disclosure objective. Some commentators have argued that Congress intended to fundamentally change the rules of prior art in a way that would encourage secrecy rather than disclosure. Under this interpretation of the new law, an inventor can use its process in secret for commercial purposes, potentially forever, and still file a patent on that invention at some point in the future. Far from encouraging disclosure, on this interpretation the effect of the AIA is to encourage secrecy and delay in patenting. Curiously, the argument is that Congress signaled its intent to make this fairly radical change by re-enacting language that had been in the Patent Act for the last 140 years: the words “public use.”

Because two of these commentators, Bob Armitage and Joe Matal, were involved in the drafting of the AIA, this argument has carried substantial weight, and the PTO in 2013 adopted regulations that read the term “public use” in the AIA as meaning something completely different than it had for the century before 2011.

In this paper, I make two points. First, as a matter of statutory interpretation it is unlikely that Congress intended to make such a change, not only because they readopted existing statutory language but because other parts of the statute make no sense under such an interpretation. Second, reading the AIA as making such a change would be unwise as a policy matter, not only because it would encourage secrecy but because it would undermine confidence that other terms reenacted in the AIA have the same meaning they have accrued in decades of common law.

**Foresight bias in patent law**

Sean B. Seymore (Vanderbilt University - Law School)

*Notre Dame Law Review, Forthcoming*


Much of patent reform has focused on efforts to make it harder to obtain and enforce low-quality patents. The most straightforward way to achieve this goal is to raise the substantive standards of patentability. What is often ignored in discussions about raising patentability standards is that high-quality inventions can slip through the cracks. What is more troubling is that sometimes this happens because of bias. This Article draws attention to foresight bias, which occurs when a decisionmaker lets over pessimism and an oversimplified view of the future influence the patentability determination. Foresight bias leads to a patent denial regardless of the invention’s technical merit. Particularly susceptible are inventions emerging from “unpredictable” fields like chemistry and biotechnology — things like chemical compounds and DNA fragments. If the invention’s principal purpose is to serve as a “building block” for something else, it is unpatentable. The fear is that a patent could create a monopoly of knowledge and impede future research. Empirical studies, however, suggest that these fears have largely not materialized. More importantly, the patent denial costs the inventor, society, and the patent system.

This Article offers a solution to this problem. It proposes a new paradigm that gauges the patentability of building block inventions in unpredictable fields objectively without reliance on the utility requirement — the principal conduit for foresight bias. Its implementation will promote disclosure, foster more creative activity, reduce wasteful duplicative research efforts, and promote technological progress — all important objectives of the patent system. Eliminating the bias will also reconnect the patent system to many of the technical communities that it serves.
Reinventing copyright and patent
Abraham Bell (University of San Diego School of Law)
Gideon Parchomovsky (University of Pennsylvania Law School)
Working Paper

Intellectual property systems all over the world are modeled on the one-size-fits-all principle. However important or unimportant, inventions and original works of authorship receive the same scope of protection, for the same period, backed by the same variety of legal remedies. Metaphorically speaking, all intellectual property is equal under the law. This equality comes at a heavy price. The equality principle gives all creators access to the same remedies, even when those remedies create perverse incentives. Moreover, society overpays for innovation by inflicting on society more monopoly losses than are strictly necessary to incentivize production.

In this article, we propose a solution for these problems in the form of a self-tailored system of intellectual property rights. The self-tailored system would allow inventors and creators to self-select the optimal protection for their intellectual works. Working from the bottom up, our self-tailored system would give each innovator a basic package of intellectual property rights and enforcement powers and then allow her to add additional rights and legal elements in exchange for a fee.

Our self-tailored system would reduce wasteful litigation while encouraging wider dissemination and more extensive use of inventions and expressive works. In addition, our proposal would lower the social cost of granting monopoly protection to intellectual goods while at the same time, maintaining an adequate level of economic incentives to create and invent. Accordingly, our self-tailored system would constitute a marked improvement over the extant one-size-fits all design of intellectual property rights.

Unlike other proposals for reform that seek to improve access to expressive works and inventions via the use of compulsory licenses and other coercive policies, our model is purely voluntary. It respects authors’ and inventors’ autonomy and uses market mechanisms — specifically, pricing — to recalibrate our intellectual property system in a way that improves societal well-being.

The debilitating effect of strong patents
William Hubbard (University of Baltimore - School of Law)
Working Paper

Are we underestimating the costs of patent protection? Scholars have long recognized that patent law is a double-edged sword. While patents promote innovation, they also limit the number of people who can benefit from new inventions. In the past, policymakers striving to balance the costs and benefits of patents have analyzed patent law through the lens of traditional, neoclassical economics. This Article argues that this approach is fundamentally flawed because traditional economics relies on an inaccurate oversimplification: that individuals and firms always maximize profits. In actuality, so-called “productive inefficiencies” often prevent profit maximization. For example, cognitive biases, bounded rationality, habituation, and opportunism all contribute to productive inefficiencies that harm individuals, firms, and ultimately society. Moreover, a variety of theoretical analyses and empirical studies demonstrate that robust competition reduces productive inefficiencies. Consequently, patents that substantially limit
competition exacerbate productive inefficiencies, and an important effect of patent law has been systematically overlooked. This Article begins to fill this void and demonstrates that consideration of productive inefficiencies sheds new light on numerous unresolved and contentious debates in patent law.

**Short-circuiting contract law: the Federal Circuit's contract law jurisprudence and IP federalism**

Shubha Ghosh (University of Wisconsin Law School)

*Working Paper*


The Federal Circuit was established in 1982 as an appellate court with limited jurisdiction over patent claims. However, the Federal Circuit has used this limited jurisdiction to expand its reach into contract law, developing a federal common law of contract in cases involving patents. Given the growing importance of patent litigation in the past three decades, this creation of an independent body of contract law creates uncertainty in transactions involving patents. This troublesome development received attention in Stanford v Roche, a 2011 Supreme Court decision uphold the Federal Circuit's invalidation of a patent assignment to Stanford University. This Article documents the development of the Federal Circuit's contract jurisprudence and develops a theoretical framework for assessing this development based on scholarship on contractual innovation by Gilson, Sabel, & Scott (2013). The Article concludes with a recommendation that the Federal Circuit defer to the contractual orderings of the parties in a manner consistent with intellectual property federalism.

**Copyright Law**

**Intellectual property and the presumption of innocence**

Irina D. Manta (Hofstra University - Maurice A. Deane School of Law)

*Working Paper*


Our current methods of imposing criminal convictions on defendants for copyright and trademark infringement are constitutionally defective. Previous work has argued that due process under the Sixth Amendment requires prosecutors to prove every element of a crime beyond a reasonable doubt, including the jurisdictional element. Applying this theory to criminal trademark counterfeiting results in the conclusion that prosecutors should have to demonstrate that an infringing mark needs to have traveled in or affected interstate commerce, which is currently not mandated. Parallel to this construction of the Commerce Clause, criminal prosecutors would also have to prove that Congress has the power to reach individual copyright infringers under the Intellectual Property Clause. This presents little difficulty under the traditional understanding of the clause as prosecutors would only need to show that convicting a defendant serves to secure the rights of authors. Some contemporary scholars have argued, however, that the text of the Intellectual Property Clause must be understood to mean that Congress can only enact copyright legislation if it serves to promote progress. If this notion is correct and is combined with this article’s theory of the requirements of the Sixth Amendment, prosecutors would have to prove that individual convictions will serve to promote progress before courts can impose sentences in given cases. While this could raise costs and has the potential to reduce the number of cases brought, prosecutors may have little choice but to introduce expert testimony to demonstrate an effect on progress, similar to the use of expert evidence in antitrust litigation and related contexts.
‘What exactly are you implying?’: the elusive nature of the implied copyright license
Christopher M. Newman (George Mason University School of Law)

Every copyright lawyer knows Effects Associates v. Cohen, the case of the exploding alien yogurt. The Ninth Circuit’s opinion raises — and doesn’t really answer — troubling doctrinal questions about the nature of an implied copyright license: Is it a kind of contract, and if so, what kind? What principles govern whether one exists and whether it can be terminated? Is it transferable by the licensee? Does it bind assignees of the copyright? And what sources of law should courts look to in deciding these matters?

Building on prior work about the nature of a license interest, I provide an account of implied copyright license doctrine that seeks to answer these questions while staving off two different misconceptions. One is the faulty premise that licenses are contractual obligations, and that therefore findings of implied license must be somehow justified in accordance with state contract law. The other is the view that implied license is an open-ended invitation for courts to override owners’ rights of control in service of various policy goals.

Distinguishing implied license from the adjacent doctrines of estoppel, exhaustion, and compulsory license, I show it to be rooted, not in contract, but in the same implied consent that is recognized as providing a defense to property and other torts. Implied license doctrine uses context-based default rules to allocate the burdens of seeking or disclaiming grants of permission, thereby discouraging opportunism and reducing transaction costs without harming copyright owners’ legitimate interests in control. In addition, I show how explaining implied license doctrine through a property framework resolves the problems of irrevocability, transferability, and choice of law that have long led to confusion in this part of the law.

IP & Biotechnology

Patent trolling — why bio & pharmaceuticals are at risk
Robin Feldman (University of California Hastings College of the Law)
W. Nicholson Price II (Harvard University)
Working Paper

Patent trolls — also known variously as non-practicing entities, patent assertion entities, and patent monetizers — are a top priority on legislative and regulatory reform agendas. In the modern debates, however, the biopharmaceutical industry goes conspicuously unmentioned. Although biopharmaceuticals are paradigmatically centered on patents, conventional wisdom holds that biopharmaceuticals are largely unthreatened by trolls. This article shows that the conventional wisdom is wrong, both theoretically and descriptively. In particular, the article presents a ground-breaking study of the life science holdings of 5 major universities to determine if these might be attractive to monetizers.

This was deliberately a light, rather than an exhaustive, search. Nevertheless, we identified dozens of patents that could be deployed against current industries. These include patents on active ingredients of
drugs; methods of treatment; screening methods to identify new drugs; manufacturing methods; dosage forms; and ancillary technologies that could be deployed in a “peddler’s bag” approach. The article describes the types of patents we found, including an example of each type.

In deciding whether to undertake this analysis, we lost sleep over whether the potential for harm outweighed the potential benefit. If reform efforts are not undertaken, our work could do no more than provide a handy road map for those who would follow. However, with scattered anecdotal evidence suggesting that monetization is moving into biopharmaceuticals, life sciences trolling is predictable and in its infancy. If reforms are implemented before the problem proliferates, legislators and regulators could cabin the activity before it becomes deeply entrenched and too much harm occurs.

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.

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