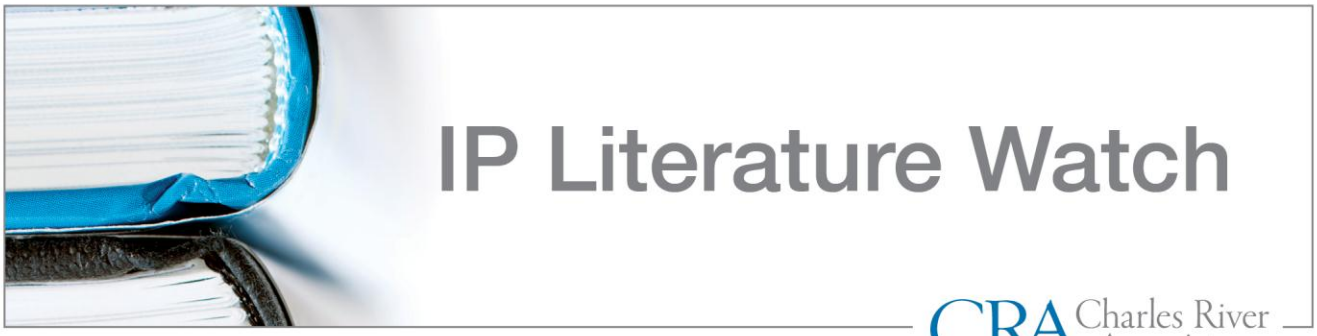

September 2013

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

'Holding up' and 'holding out'

Colleen V. Chien
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318648

Patent “hold-up” and patent “hold-out” present important, alternative theories for what ails the patent system. Patent “hold-up” occurs when a patent owner sues a company when it’s most vulnerable – after it has implemented a technology – and is able wrest a settlement because it’s too late for the company to change course. Patent “hold-out” is a term I use to describe the practice of companies routinely ignoring patents and resisting patent owner demands, because the odds of getting caught are small. Hold-up has arguably predicted the current patent crises – the smartphone wars, standards patents, or trolls all involve the ex-ante assertion of technology patents. Hold-up theory has been embraced by thought leaders and fueled the current drive by Congress and President Obama to reform the patent system. In this essay, I make the counterintuitive case that hold-up theory is wrong – or at least incomplete – and further, that what it is missing is full consideration of the other side – the side of hold-out. When large companies systematically “hold out” on patentees, they have no choice but to work with efficient patent enforcers or “trolls.” When small inventors can’t get their due in the marketplace due to unfair disadvantages, jurors just may give it to them in court. I argue that considering ‘hold-out” and “hold-up” together provide a more complete picture than focus on either story alone, and that doing so reveals surprising pathways to a better patent system – focused on the design, rather than the doctrine of patent law. Instead of trying to eliminate all technology patents, or to enforce all of them, we should try to price them appropriately and reduce the distortions they produce. Instead of trying to make patent law perfect, we should make it cheaper, more streamlined, and more equitable. To do so, lawmakers should prioritize: 1) getting patentees and targets on the same page as early as possible, through early

dispositive and damages disclosures, 2) tightening the interfaces between the various patent agencies, and 3) making it cheaper to resolve low-value disputes, as capped for example by the defendant's revenue exposure. Each of these steps would go a long way to curbing both hold-up and hold-out.

The comparative law and economics of standard-essential patents and FRAND royalties

Thomas F. Cotter
Texas Intellectual Property Law Journal, Forthcoming
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318050

Standard setting organizations often require their members to declare which of their patents are essential to the practice of a prospective standard, and to agree to license any such standard-essential patents (SEPs) on "fair, reasonable, and nondiscriminatory" (FRAND) terms. Among the issues that have arisen in recent disputes involving FRAND-encumbered SEPs are (1) whether a FRAND commitment creates a binding contract for the benefit of third parties, obligating the SEP owner to forgo the right to seek injunctive relief for the infringement of the SEP; (2) whether the law of remedies, or other principles of generally applicable civil law such as the doctrine of "abuse of right," can limit the prevailing SEP owner's ability to obtain injunctive relief; (3) the circumstances under which competition law (antitrust) may play a role in resolving these matters; (4) whether the patentee is entitled to relief in the form of ongoing damages, if one or more of these bodies of law eliminates the possibility of an injunction; and (5) if so, how should courts calculate those damages. This article provides both an overview of how courts and other entities have begun to address these questions in the United States and elsewhere, and my analysis of the advantages and disadvantages of different possible approaches. I argue, among other things, first that courts generally should not allow SEP owners to obtain injunctions, but rather only ongoing damages; second, that in principle though perhaps not always in practice, it is preferable to use contract and patent law to achieve this result, as opposed to antitrust; and third, that in awarding monetary relief for the infringement of SEPs courts should apply the same methodology the use to calculate reasonable royalties generally, subject to a few modifications.

Activating Actavis

Aaron S. Edlin, C. Scott Hemphill, Herbert J. Hovenkamp and Carl Shapiro
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2317241

In Federal Trade Commission v. Actavis, Inc., the Supreme Court at last provided fundamental guidance about how courts should handle antitrust challenges to reverse payment patent settlements. The Court came down strongly in favor of an antitrust solution to the problem, concluding that "an antitrust action is likely to prove more feasible administratively than the Eleventh Circuit believed." At the same time, Justice Breyer's majority opinion acknowledged that the Court did not answer every relevant question. The opinion closed by "leaving to the lower courts the structuring of the present rule-of-reason antitrust litigation."

This article is an effort to help courts and counsel fill in the gaps. We identify and operationalize the essential features of the Court's analysis. We describe the elements of a plaintiff's affirmative case and justifications that may be offered by defendants. For private cases, we outline an appropriate procedure for evaluating damages and suggest specific jury instructions.

IP & Innovation

Property as platform: coordinating standards for technological innovation

Henry E. Smith

Journal of Competition Law & Economics, Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2321365

This paper examines the coordination of inputs to the development and use of technology as a problem in the theory of property. Recent misunderstanding of property, in terms of both the substance of its rights and the implications of its remedies, have presented property as an obstacle to – rather than as a platform for – rapidly evolving technology. This paper will first present a framework for property that captures its role in organizations, intellectual property, as well as property law itself. An information-cost theory of property stresses modularity, standardization, and hybrid systems of private and common rights, which allow for separation of functions and specialization. Modularity and separation in property allows for specialization but also give rise to the potential for strategic behavior. Each specialist may only maximize locally, which can lead to social losses. To counteract this strategic behavior, a combination of boundary placement and interface rules can be used, as is commonly seen in common property systems and their variants. The paper then applies this framework to Standard Setting Organizations (SSOs) and shows that separation of the standardization function is yet another type of property separation and specialization. As with other dimensions of separation, strategic behavior becomes possible. But contrary to some widespread views, the tools of property do not simply cause the problem of opportunistic hold up in SSOs; property also provides some solutions, in this case through doctrines of equity that are aimed at counteracting opportunism in general.

Market outcomes and dynamic patent buyouts

Alberto Galasso, Matthew F. Mitchell and Gabor Virag

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2315270

Patents are a useful but imperfect reward for innovation. In sectors like pharmaceuticals, where monopoly distortions seem particularly severe, there is growing international political pressure to identify alternatives to patents that could lower prices. Innovation prizes and other non-patent rewards are becoming more prevalent in government's innovation policy, and are also widely implemented by private philanthropists. In this paper we describe situations in which a patent buyout is effective, using information from market outcomes as a guide to the payment amount. We allow for the fact that sales may be manipulable by the innovator in search of the buyout payment, and show that in a wide variety of cases the optimal policy still involves some form of patent buyout. The buyout uses two key pieces of information: market outcomes observed during the patent's life, and the competitive outcome after the patent is bought out. We show that such dynamic market information can be effective at determining both marginal and total willingness to pay of consumers in many important cases, and therefore can generate the right innovation incentives.

Patenting strategies and characteristics of declared inventions in the Long Term Evolution standard

Federico Caviggioli, Antonio De Marco, Francesco Rogo and Giuseppe Scellato
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2316109

This study provides an empirical analysis of patent declarations at the European Telecommunications Standards Institute (ETSI) concerning the core releases of the Long Term Evolution standard for mobile communications. The paper builds on recent contributions that have analyzed strategic patent filing behaviors of firms in the context of standard setting process in the telecommunication sector. We find that the distribution of essential inventions across firms appears less concentrated than in previous mobile standard generations, mainly due to the entry of new global players in the field. The data reveals substantial heterogeneity in the strategies adopted by companies with respect to the timing of filing of patents then claimed as essential for the standard. Some companies seem to strategically postpone the application of patents -- relying on industrial secrecy -- while observing the evolution of the standard setting process. The comparison of declared patents with a control sample of non-declared reveals that on average the former relate to more radical, complex and science-based inventions. Moreover, patents filed in the later phases of the consolidation of the standard tend to show a narrower technological scope and are less likely to have joint assignment.

Corporate science, innovation and firm value

Markus Simeth and Michele Cincera
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2317166

It can be observed that many R&D performing firms produce scientific knowledge and disclose research outcomes in scientific journals. At the micro-level, prior work identified several potential benefits of such a strategy like superior access to informal information networks or the opportunity of recruiting the best PhD graduates. However, scientific research is costly and subject to considerable uncertainty with respect to the outcomes, and the disclosure may lead to spillover effects that decrease the ability of firms to generate returns of their R&D investments. Overall, it remains unclear if and under what conditions science-oriented strategies are beneficial for firms. We address this gap and examine the impact of scientific activities on the firm’s market value using accounting data for US firms from Compustat and matched patent and scientific publication data. We find evidence for a positive impact of scientific publication stocks on the firm value beyond the effects of R&D, patent stocks and patent quality

Multiproduct multinationals and the quality of innovation

Sasan Bakhtiari, Antonio Minniti and Alireza Naghavi
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2317914

This research sheds light on the role of product scope on the innovation activity of multinational multi-product firms. We use patent citation data to break down innovation into two types by measuring the degree to which innovation performed by firms is fundamental and the extent to which the output of the R&D can be spread across different product lines. We focus on two features in multinational production: (i) fundamental innovation is geographically more difficult to transfer abroad to foreign production sites,

(ii) learning spillovers can occur from international operations. The results reveal that the second effect is more likely to dominate when a firm is active in more product lines. We argue that a more diversified portfolio of products increases a firm's scope of learning from international operations, thereby enhancing its ability to engage in more fundamental research. In contrast, firms with less product lines that geographically separate production from innovation shift the innovation activities towards more specialized types of innovation.

Do fixed patent terms distort innovation? Evidence from cancer clinical trials

Eric B. Budish, Benjamin N. Roin and Heidi Williams
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2325803

Patents award innovators a fixed period of market exclusivity, e.g., 20 years in the United States. Yet, since in many industries firms file patents at the time of discovery ("invention") rather than first sale ("commercialization"), effective patent terms vary: inventions that commercialize at the time of invention receive a full patent term, whereas inventions that have a long time lag between invention and commercialization receive substantially reduced - or in extreme cases, zero - effective patent terms. We present a simple model formalizing how this variation may distort research and development (R&D). We then explore this distortion empirically in the context of cancer R&D, where clinical trials are shorter - and hence, effective patent terms longer - for drugs targeting late-stage cancer patients, relative to drugs targeting early-stage cancer patients or cancer prevention. Using a newly constructed data set on cancer clinical trial investments, we provide several sources of evidence consistent with fixed patent terms distorting cancer R&D. Back-of-the-envelope calculations suggest that the number of life-years at stake is large. We discuss three specific policy levers that could eliminate this distortion - patent design, targeted R&D subsidies, and surrogate (non-mortality) clinical trial endpoints - and provide empirical evidence that surrogate endpoints can be effective in practice.

Private equity and investment in innovation: evidence from patents

Josh Lerner, Morten Sorensen and Per Strömberg
Journal of Applied Corporate Finance, Vol. 25, Issue 2, pp. 95-102, 2013
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2324599

The authors' analysis of the patenting activity of 472 companies that received private equity investments between 1986 and 2005 provides suggestive evidence of an increase in the effectiveness (though not necessarily the quantity) of their innovative activities. After such companies received private equity backing, the patents they applied for received more frequent citations than patents awarded before the involvement of PE firms. Companies acquired by private equity also show no sign of deterioration in patent "originality" and "generality," which have been shown to be fairly reliable indicators of the fundamental nature of the research. And while there is no clear pattern of change in the level of patenting activity, corporate patent portfolios become more focused in the years after the private equity investments. The increases in our measure of patent "impact" are greatest in the areas that constitute the companies' historical core strengths. These findings are likely to prove increasingly important as private equity continues its incursions into growth areas of the economy.

IP Law & Policy

Predictability and nonobviousness in patent law after KSR

Christopher Anthony Cotropia
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2316938

In KSR International Co. v. Teleflex, Inc., the Supreme Court addressed the doctrine of nonobviousness, the ultimate question of patentability, for the first time in thirty years. In addition to mandating a flexible approach to deciding nonobviousness, the KSR opinion also introduced two predictability standards for determining nonobviousness. The Court described predictability of use ("Type I predictability") — whether the inventor used the prior art in a predictable manner to create the invention — and predictability of the result ("Type II predictability") — whether the invention produced a predictable result — both as a means for proving obviousness.

While Type I predictability is easily explained as part of the flexible approach endorsed by KSR, Type II predictability represents a possible radical shift in the nonobviousness doctrine. Instead of focusing on whether reasons already existed to create the invention, like Type I predictability does, a Type II predictability analysis takes the invention's creation as a given and looks instead at the invention's operation. Type II predictability moves the analysis away from the gap between the prior art and the invention to the invention only.

The Patent Office, the Federal Circuit, and lower courts are using Type II predictability fairly extensively. The problem with this usage is that Type II predictability runs counter to statutory language, introduces hindsight bias, discriminates against certain technologies, and conflicts with basic patent theory. Accordingly, the Patent Office and courts need to reconsider how they use Type II predictability and interpret this part of KSR.

Removing the troll from the thicket: the case for enhancing patent maintenance fees in relation to the size of a patent owner's non-practiced patent portfolio

David S. Olson
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318521

The legal literature is replete with discussions of the problems caused by large patent portfolios. While the strongest complaints are about non-practicing entities, or "trolls," suing in the software and high-tech industries, large patent portfolios can cause competition and gridlock problems even when held by active industry participants. As has been well documented, many of the problems arise from the fact that patent boundaries and validity are often uncertain. Moreover, because assignments of patents need not be registered, and because trolls often use multiple shell companies, it is often difficult to know who owns what patent, or how many patents a particular entity owns. Thus, not only must innovators and firms worry about the size of patent portfolios in the hands of their competitors and trolls, but, even if they are willing to spend substantial time and effort, they may not be able to know all of the potential patent liability they may face, and from whom.

It is proposed that patent maintenance fees be increased according to a sliding scale tied to the number of non-practiced patents a patent owner has in its portfolio. Thus, as the size of a firm's patent portfolio increases, so too does the maintenance fee multiplier charged for all its patents, beginning with the second maintenance fee due date. All patents with common ownership interests would be aggregated in determining the fee enhancement. Because the enhanced fees do not kick in until 7.5 years after issuance, incentives to invent and to disseminate should not be significantly reduced. This proposal will encourage large patent portfolio holders to pare down their holdings by determining which of their older patents are not worth maintaining. This will benefit competitors and new inventors who are currently subject to hold-up problems from large portfolios — many of which are particularly caused by old, low-value patents held en masse.

The European Unified Patent Court: assessment and implications of the federalisation of the patent system in Europe

Dimitris Xenos

(2013) 10(2) SCRIPTed - Journal of Law, Technology & Society 246-277

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2324123

The push for the creation of a European Unified Patent Court (UPC) aims to achieve the federalisation of the patent system in Europe. By replacing the jurisdiction of national courts in the legal disputes relating to patents with unitary effect, the UPC will create a new centralised judicial authority for patent litigation and standard-setting. However, there is evidence that the UPC Agreement was rushed and its impact assessment was not based on valid data. Therefore, questions are raised about the implications it may have, especially those regarding language arrangements in the litigation proceedings and the impact which may arise from the loss of national sovereignty, as national judges will no longer be able to adjust patentability standards to the development and sustainability needs of local businesses. This article examines the impact of the loss of national sovereignty and argues that, to the extent that the UPC establishes a monopolistic source of legal power which escapes the control of the democratic policy-making process, its authority is problematic. Additionally, the findings of relevant studies are analysed in order to evaluate the original arguments of the EU Commission, and to go beyond the narrow context within which the debate on the UPC has been framed.

Patent prudential standing

Xuan-Thao Nguyen

George Mason Law Review, Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2321808

This Article is the first to focus on patent prudential standing. Patent prudential standing, a creation of the Federal Circuit, wastes precious resources and serves no sound policy goal. Under patent prudential standing, after many resources have been expended on the merits of a patent infringement case, parties face a reversal of course by the Federal Circuit's ruling that the plaintiff, typically the exclusive licensee in a patent transaction, lacked standing to bring the case in the first place. Regardless that the plaintiff satisfies constitutional standing, the Federal Circuit propounds that the plaintiff must still meet patent prudential standing. The inquiry to ascertain whether patent prudential standing exists is confusing, confounding, and costly, as courts must evaluate whether the exclusive licensee possesses all substantial rights to the patent in a commercial transaction.

Moreover, patent prudential standing is completely unnecessary. Indeed, the Supreme Court in 1926 found that there was no need to engage in a determination of whether a patent transaction grants the exclusive licensee sufficient rights to be treated as patent owner in order to bring patent infringement litigation. The Supreme Court declared that a patent owner/licensor is an indispensable party and must be named as a coplaintiff with the exclusive licensee in patent infringement litigation. Indispensable party principle was later incorporated into Rule 19 of the Federal Rules of Civil Procedure. Therefore, to reduce uncertainty and unnecessary costs, the Federal Circuit should follow the Supreme Court's teachings and Rule 19 in all cases involving exclusive patent licensee's jurisdiction. By doing so, the Federal Circuit will wisely continue to serve as a model for courts domestically and for patent tribunals internationally.

Multi-national patent litigation: management of discovery and settlement issues and the role of the judiciary

James H. A. Pooley and Vicki T. Huang
Fordham Intellectual Property, Media & Entertainment Law Journal, Vol. 22, No. 45, 2011
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2314204

National patent laws protect intellectual property rights. However, these rights can only be enforced in the country that granted the patent. Therefore, a patent owner must pursue infringement or revocation proceedings in each country where his patent rights are challenged even if the defendant is the same party. Patent owners are forced to pursue duplicative litigation on a • nation-by-nation basis, incurring significant costs and draining valuable judicial resources. Duplicative litigation may result in conflicting outcomes, the impact of which can be complex and costly.... This article will focus on Germany, Japan, the United Kingdom, and the United States. First, we will provide a broad overview of the procedural landscape of these jurisdictions, paying particular attention to discovery and settlement. Then, we will examine the formal and informal mechanisms involved in cross-border discovery and settlement. Finally, we will propose some mechanisms that judges can use to facilitate an efficient discovery process and the settlement of international patent disputes.

Why technology customers are being sued en masse for patent infringement & what can be done

Colleen V. Chien and Edward Reines
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318666

Last year, the Children's Hospital of Philadelphia and the AIDS Healthcare Foundation were accused of patent infringement. Their alleged wrongdoing? Purchasing routers and using them to provide wireless services. A small Atlanta-based company called Bluewave, along with hundreds to thousands of small businesses, received demands for royalties for alleged patent infringement. The accusation? Using an off-the-shelf PDF machine. As incredible as they might seem, these mass patent assertions and the harm they cause are real – six out of the top ten patent litigation campaigns have exclusively named technology customers, not suppliers. This has drawn attention from state attorneys generals, Congress, and President Obama. In this article we explain the motives, opportunistic and legitimate, behind these demands, the harm they pose, and what can be done. To do this we draw from numerous sources – including surveys of in-house and outside counsel and our own experience litigating. Good business dictates that technology suppliers should generally step in to take care of their customers. But we find legal and practical barriers exist – demand letters and litigation complaints don't identify the basis for

liability, courts have denied declaratory judgment jurisdiction and the right to intervene frequently, and the courts have refused to protect customers from litigation even when suppliers have stepped up. We recommend that Congress and the courts work to (1) confirm the right of suppliers to intervene and bring cases, (2) minimize the burden on customers when suppliers do step up and participate, and (3) incent customer demand letters and complaints to specifically identify the product which gives rise to liability and disclose other basic information, so that customers may assess their own risk and pass on the demand to their supplier. We also provide a host of reforms that federal lawmakers should consider to make end users less attractive targets for patent lawsuits.

Patent assertion and startup innovation

Colleen V. Chien

New America Foundation, Open Technology Institute White Paper, September 2013

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2321340

This report, supported by funding from the New America Foundation, details the experiences of startups with patent assertion based on surveys of about 300 venture capitalists and venture-backed startups conducted in 2013. According to survey responses, patents for novel inventions play a generally positive and at times crucial role for startups. They help to transfer technology, enable investment, and improve exits, particularly in bio/pharma industries. But patent assertions by NPEs, which at times hit startups when they are least able to fight them — on the eve of a funding or acquisition event, or, 40% of the time, in the context of the startups' customers — can have significant and at times devastating impacts on companies. Though partnering with NPEs to monetize patents can be beneficial to companies as well, the benefits do not appear to offset the harms, according to survey responses and VC interviewees whose companies had been sold to and been sued by NPEs. Furthermore, many survey respondents do not find these to be socially productive assertions — but rather on the basis of patents that, though they may be valid, are viewed as frivolous or overbroad.

Though the risks associated with patent assertions were described as feeling "unbounded," startups are routinely expected to absorb these risks in their dealings with acquirers, investors, and customers. Overall, these assertions have added friction to technology transactions, reduced the value of pursued startups, and triggered large indemnities, according to study subjects. Specifically, the report finds: Finding 1: Based on survey responses, 75% of surveyed venture capitalists (VCs) and 20% of venture-backed startups with patent experience have been impacted by an NPE demand; nearly 90% of all tech VCs have been impacted. The demand was based on the startup's adoption of another's technology 40% of the time. Low quality and software patents were identified as problematic. Finding 2: Although NPE assertions are perceived as motivated primarily by money, respondents reported routinely experiencing non-financial consequences including delays in hiring, meeting milestones, and business line pivots and exits. Finding 3: Most VC respondents believe patents are important for innovation. An estimated 5% of startups have sold their patents to NPEs, experiencing positive benefits from doing so. However, 84% surveyed VCs, many whose companies had sold to NPEs, still believed that NPEs were harmful for innovation. Finding 4: Startup concerns with patent enforcement go beyond NPEs and extend to the disadvantages startups suffer relative to larger incumbents as a result of poor patent quality, high costs, and delays associated with the patent system, survey respondents told us. The inability of startups to defend their own patents and suits brought by "patent predators," larger companies that sue with anti-competitive motives, also presented specific concerns.

To ameliorate the harms of patent assertion on small companies, the report recommends several interventions, keeping in mind the special needs of startups, who, with their fewer resources, less time, and greater focus on building the business, are at a relative disadvantage when patent processes are expensive, slow, or require deep patent expertise (or “patent game”-playing skills).

These include: Recommendation 1: Fully fund the PTO and its quality initiatives including tightening functional claiming and expand low-cost access to the PTO’s transitional program and other forms of post-grant review by reducing fees for small and micro entities and supporting and prioritizing collaborative challenges to patents asserted against large numbers of defendants, particularly by downstream users and small entities. Recommendation 2: Make patent cases about the merits, not about who can outlast or outspend the other side, by permitting more discretion in awarding fees and costs for non-core discovery and promoting uniformity and early dispositive rulings, for example by requiring the Patent Pilot Program to implement and measure the impact of best practices. Recommendation 3: Make patent risks more manageable for startups by requiring demand letters and complaints to disclose the real-party in interest, claim charts, related litigations and reviews, and licenses that could cover the target. Recommendation 4: Make startups less attractive targets by limiting the liability of downstream users and the precedential value of the settlements signed by small companies.

IP & Litigation

Patent privateers: private enforcement's historical survivors

John M. Golden

Harvard Journal of Law and Technology, Vol. 26, p. 545, 2013

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2310241

Commentators have long debated the relative merits of private and public law enforcement. Environmental-law citizen suits, securities-law class actions, and qui tam litigation have been focal points for controversy about how and when to use private-enforcement rights to help implement government policy. U.S. patent law’s recently abrogated qui tam provision for false marking has highlighted potential pathologies of private enforcement. Patent law also raises questions of private enforcement through debates over the extent to which third parties, including consumers, should have access to administrative or court proceedings to challenge patent rights. Most fundamentally, patents themselves provide private rights to sue — i.e., private-enforcement rights — that government grants to advance a public interest in promoting innovation. Concerns about so-called “patent trolls” or other litigation-focused patentees emphasize the fact that, like another form of “private enforcer” — historical privateers — patentees are private parties possessing legal authority to raid others’ commerce for the supposed greater good. Thus, in certain respects, viewing patentees as privateers can provide a more useful metaphor than common analogies between patentees and owners of tangible property. Privateers bearing letters of marque and reprisal could, of course, produce public benefits, particularly for governments relatively short on cash. But privateering could also lead to abuse or other behavior not perfectly in line with overall social interests. Analogy with past and present restrictions on citizen suits, qui tam suits, and privateers themselves sheds light on patent law’s historical evolution and suggests various forms that restriction or regulation of “patent privateering” might take.

Certain patents

Alan C. Marco and Saurabh Vishnubhakat

Yale Journal of Law & Technology, Vol. 16, No. 1 (2013, Forthcoming)

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2324538

This Article presents the first in a series of studies of stock market reactions to the legal outcomes of patent cases. From a sample of patents litigated during a 20-year period, we estimate market reactions to patent litigation decisions and to patent grants. These estimates reveal that the resolution of legal uncertainty over patent validity and patent infringement is, on average, worth as much to a firm as is the initial grant of the patent right. Each is worth about 1.0-1.5% excess returns on investment. There are significant differences between such market reactions before and after the establishment in 1982 of the United States Court of Appeals for the Federal Circuit. There are also significant differences among the reactions of patent holders to resolved uncertainty depending on their litigation posture as plaintiffs or defendants. Interestingly, there is no similar effect for appellate decisions relative to trial decisions. The normative implications of these findings proceed, not from the magnitude of the quantitative results — which are statistically meaningful but modest — but rather from our illustration that uncertainty in the value of patent rights is quantifiable and so can be correlated with patentee and litigant behavior in developing patent policy.

IP & Biotechnology

Drugged out: how cognitive bias hurts drug innovation

Cynthia M. Ho

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2318820

In recent years, legal scholars have begun to identify and evaluate how the cognitive biases held by all individuals impact law and policy. Thus far, however, scholars have not recognized the existence or impact of biases that impact pharmaceutical innovation and patent policy. This Article fills that gap at a key juncture. Currently, the industry mostly produces drugs that do not provide significant clinical benefits over existing drugs. Further, even the number of new drugs produced every year is modest compared with exponentially increasing pharmaceutical expenditures.

This Article shows that there are significant cognitive biases that play a key, but thus far unrecognized, role in promoting modest innovation. In particular, there are views of pharmaceutical innovation and patent policy that have been broadly accepted amongst not only the industry, but by policy makers and some scholars that are not soundly supported. These views, referred to as “schemas,” are perpetuated because of well-established cognitive biases explained in the Article. Recognizing these schemas is critical because scholars and policy makers are vulnerable to accept these mistaken assumptions as fact, and create and recommend misguided policies. Although these schemas revealed here are broadly consistent with cognitive science studies, this is the first Article to not only document schemas in the realm of pharmaceutical innovation, but also show how they are perpetuated despite contrary evidence. After revealing these schemas, this Article proposes concrete steps to counteract them, including possible steps to modify patent policy in light of this new understanding.

Making do in making drugs: innovation policy and pharmaceutical manufacturing

W. Nicholson Price II

Boston College Law Review, Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2311682

Drug recalls, contamination events, and shortages are on the rise, but drug companies still rely on decades-old manufacturing plants and processes. Contrary to widespread perceptions, drug manufacturing is typically expensive, inefficient, and non-innovative. Drug companies spend much more on manufacturing than on research and development, but the industry lags far behind the innovative manufacturing found in other industries. This lack of innovation in drug manufacturing stands in stark contrast to the innovation present in drug discovery. Drug discovery is the focus of a calibrated innovation policy that combines patents and the regulatory regime. Manufacturing lacks such attention, and the costs are great, both in dollars and in human lives. This article addresses the previously underappreciated role of manufacturing in innovation studies and policy.

The stagnation of pharmaceutical manufacturing results from regulatory barriers and ineffective intellectual-property incentives. As a result of the difficulty enforcing manufacturing process patents, manufacturers tend to rely on trade secrecy instead, which reduces innovation. Making matters worse, regulation actively impedes innovative changes to manufacturing methods through substantive and procedural barriers across the lifespan of a drug. To address these challenges, this article suggests several direct regulatory reforms. It also proposes novel ways that regulation can be used to change the function of intellectual property incentives, which fit particularly well in the drug manufacturing context but could be extended to different areas of innovation policy. For example, FDA could be charged with operating a system of temporary market exclusivity for manufacturing innovation parallel to the patent system. Alternately, FDA could require disclosure of manufacturing methods to drive the industry from opacity and trade secrecy towards transparency and patent protection for innovation. A better targeted and more effective innovation policy could improve the current sad state of drug manufacturing with potentially immense economic and health benefits.

Anticompetitive marketing in the context of pharmaceutical switching in Europe

Bengt Domeij

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2317182

The article deals with the intersection between competition law rules on abuse of a dominant position and switching strategies employed by pharmaceutical originator companies. Switching is also known as ever-greening, product hopping or product life cycle strategies. It is one of the most topical issues in the patent-antitrust intersection today and consists in launching a slightly modified, second generation pharmaceutical, 1-2 years before the patent exclusivity expires for a first generation product. In this window originators try to migrate patients to a reformulated product. If successful, this will shield the originator from the effects of generic substitution for the first generation product. In the AstraZeneca-case the EU General Court held that a selective redrawal of marketing authorizations for a first generation product was an abuse of a dominant position under article 102 TFEU. This article focuses on other components in a switching strategy, especially the timing and content of marketing efforts by an originator company. Marketing is pro-competitive in almost all cases, but due to the special regulatory context in the pharmaceutical industry, marketing by an originator company can be used in an excluding

fashion in the pharmaceutical industry. The conclusion is reached that casting the quality or price of the originator's first generation product in a bad light, in comparison with the second generation product during exclusivity for the first generation product, may be an abuse by a dominant firm falling foul of article 102 TFEU. It is in effect equivalent to negative comparative advertising messages concerning a competitor's soon to be launched product.

Other IP Topics

Can only physical subject-matter be patentable?

Reinier B. Bakels
Working Paper
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2313804

In Europe, only technical subject-matter is susceptible for patent, and in the United States abstract ideas are excluded – but no one knows precisely how to interpret these rules. Isn't it the simplest solution to provide that only physically tangible matter can be patented? In case law from various jurisdictions we find that the application of a physicality requirement invariably fails, and we analyse the reasons for these failures. Ultimately one should acknowledge that a physicality requirement is only an indirect means to exclude "inappropriate" subject-matter from patentability, such as certain business methods. Patent law traditionally excludes certain subject-matter for "obvious" reasons. That may be interpreted as: for reasons inherent to the system and purpose of patent law. hence we look for the natural boundaries of the domain of patent law, and we find that only suited (and needed) to appropriate a certain type of knowledge. That awareness may be helpful for the courts, that are very confused about the "patentable subject-matter" limitations after many fruitless clarification attempts on both sides of the Atlantic.

The anti-economy of fashion: an openwork approach to intellectual property protection

Amy L. Landers
Fordham Intellectual Property, Media & Entertainment Law Journal, Vol. 24, No. _ (2014), Forthcoming
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2296769

Fashion's cultural connections provide the groundwork for a theory to resolve the critical questions of protection for works that draw strongly on exogenous inputs. This article proposes that narrow protection for fashion is both economically justified, theoretically sound, and beneficial to the field because it facilitates spillovers in a manner that allows others to create the endless variations that are the lifeblood of this vibrant industry.

Such protection relies on a theory of openworks, which applies to designs that have a high level of input from outside of the creator's realm of activity. In fashion, inspiration that derives from the street, fine art, music, trends, and other sources of culture. Further, such works have a significant level of interaction with those who engage with the work. Once a piece leaves a designer's hands, wearers inhabit the work and provide individualized authorial inputs by mixing, contextualizing, and visually modifying the designer's original vision. Unlike a static sculpture, the wearer makes fashion his or her own. This creatively open structure, which is inherent in the medium, warrants a correspondingly less restrictive form of intellectual property protection than that provided by the current copyright and patent systems.

To further justify protection for fashion design, this article supplements the traditional economic analysis with one that draws from Pierre Bourdieu's concept of works of cultural production. Such works are not valuable based on function alone, but rather because they include expressive content that contributes to our broader societal conversation. The sale of such works operates in an anti-economy that privileges noneconomic capital, including reputational and symbolic value, at the expense of short-term profitability. Instead of seeking to maximize sales, designers endeavor to establish their reputations as aesthetic leaders in a manner that a classic economic analysis would consider irrational. Yet these qualities are critical to the maintenance of the anti-economy of cultural production, which depends on reputational capital to establish long-term economic viability. To properly analyze the effects of copying on this industry, this article applies creativity theory, economics, and anti-economics to fully evaluate the potential impact of protection in the industry.

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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