September 2016

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

Patent pacifism

Clark D. Asay (Brigham Young University – J. Reuben Clark Law School)
85 George Washington Law Review, Forthcoming
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2836162

Over the last decade, much of the intellectual property law literature has focused on the problem of "patent trolls," or patent owners who don't make products, but sue others that do. The basic complaint against these "non-practicing" or "patent assertion" entities is that their activities impose a tax on innovation, without providing offsetting societal benefits. Furthermore, their patent assertions have been on the rise, with a significant percentage of patent suits now attributable to them. In short, the troll phenomenon suggests a problem of excessive patent assertions.

Yet despite the importance of the troll phenomenon, the fact remains that most patents are never asserted, or are asserted less than they could be. In other words, under-assertion of patent rights appears to be more prevalent than over-assertion. Yet beyond noting a set of generic economic considerations that may lead to this outcome, the literature fails to provide systematic, industry-specific assessments of why patent owners choose to forego asserting their rights in so many cases. And the generic nature of these assessments is particularly problematic given that patents play significantly different roles from one industry to the next, as scholars have noted for some time. Hence, non-assertion in one industry is likely to look quite different than in another, and is almost certainly motivated by a distinct set of considerations.

This Article addresses these issues by providing a more nuanced, industry-specific model for theorizing why patent owners forego asserting their rights in so many cases (and why they may not in others). It applies this model to four specific industries: software, pharmaceuticals, biotechnology, and semiconductors. The Article then assesses the normative, theoretical, and practical implications of this industry-specific model of patent non-assertion. In particular, this Article's assessment of patent non-assertion may surprisingly help explain the rise of patent trolls in some industries. That is, the model suggests that high barriers to patent assertion in an industry may, ironically, result in increased patent assertions in the industry. This may be so, for instance, because the high barriers make patent assertion too costly and risky for the original patent holder, who then either outsources those costs to patent trolls

or becomes a patent assertion entity itself in order to realize economies of scale. Hence, this Article's industry-specific model provides guidance to policymakers by helping explain the rise of patent assertions in some industries, such as software, as well as helping identify other industries, such as biotechnology, that may be increasingly at risk of patent trolling.

FRAND arbitration: the determination of fair, reasonable and non-discriminatory rates for SEPs by arbitral tribunals

Damien Geradin (Tilburg Law & Economics Center (TILEC); University College London – Faculty of Laws)
Forthcoming, Antitrust Chronicle (Fall 2016)
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2833200

At the core of most disputes concerning the licensing of standard-essential patents (SEPs) lies the inability of the SEP holder and the standard implementer to agree on fair, reasonable and non-discriminatory (FRAND) license terms. As an alternative to court litigation, a growing number of academics, agency officials and private practitioners have advocated arbitration of SEP-related disputes, and there is anecdotal evidence that are increasingly relying on arbitration to settle such disputes. The purpose of this paper is to discuss based on the author's personal experience how arbitral proceedings to set FRAND terms work in practice, as well as the various challenges faced by arbitrators, parties, and counsel involved in such proceedings.

FRAND licensing in theory and in practice: proposal for a common framework

Justus Baron (Northwestern University – Searle Center for Law, Regulation and Economic Growth; Mines ParisTech, PSL- Cerna)
Chryssoula Pentheroudakis (IP Consultant/Lawyer)
Nikolaus Thumm (European Commission Joint Research Center)
Antitrust Chronicle, Volume 3, Number 1, Summer 2016
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2839476

This article addresses how FRAND licensing terms have been determined in theory and practice in multiple jurisdictions worldwide. In the study referred in this article, the authors review the evolving case law on FRAND from both a legal and economic perspective, and perform a comparative legal analysis while testing the economic soundness of the concepts and methodologies applied by courts and antitrust authorities in the specific cases. Bearing in mind the idiosyncrasies of SEP litigation in the respective national legal systems, the authors achieve a comprehensive overview of SEP licensing terms and carve out a common framework for the definition of FRAND based on the findings the authors have distilled from a case study analysis and literature review.

IP & Innovation

Users, patents and innovation policy

Katherine J. Strandburg (New York University School of Law)
Users, Patents and Innovation Policy, The Oxford Handbook of Intellectual Property Law (Rochelle C. Dreyfuss & Justine Pila, Eds, Forthcoming)
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2828758

Users are important innovators in many fields. Often, they do not need socially costly patent incentives to invent, disclose and disseminate their inventions. A patent-free user innovation paradigm is likely to be successful and socially desirable when an invention's value to users has a substantial non-competitive

component. If a user innovator values an invention primarily for providing a competitive edge, the patent-free user innovation paradigm is not viable. Most such inventions have little social value. Some, however, such as improved manufacturing processes, produce significant collateral value for non-users and should be encouraged. Patents may be important for these user innovations.

Socially beneficial policy interventions to buttress the patent-free user innovation paradigm might include tools and infrastructure to support user communities and changes to patent doctrine, such as accounting for user innovation in assessing nonobviousness, patentable subject matter exemptions, particularly for many types of processes, and user exemptions from infringement liability.

Trademark or patent? The effects of market concentration, customer type, and venture capital financing on start-ups' initial IP applications

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Enrico Pennings (Erasmus University Rotterdam (EUR) – Erasmus School of Economics (ESE); Tinbergen Institute; Erasmus Research Institute of Management (ERIM))
Jorn H. Block (University of Trier – Faculty of Management; Erasmus University Rotterdam (EUR) – Institute of Management (ERIM))
Christian Fisch (University of Trier – Faculty of Management; Erasmus University Rotterdam (EUR) – Department of Applied Economics; Erasmus Research Institute of Management (ERIM))
Industry and Innovation, Forthcoming
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2760862

We analyze the initial IP applications of 4,703 start-ups in the US, distinguishing between trademark and patent applications. Our empirical results show that start-ups are more likely to file for trademarks instead of patents when entering markets with a higher market concentration. Furthermore, we find that start-ups that are primarily active in business-to-consumer markets instead of business-to-business markets are more likely to file trademarks. Finally, the involvement of a venture capitalist (VC) affects the initial IP application. VC-backed start-ups are more likely than other start-ups to file initial IP in the form of trademarks rather than patents. This paper contributes to research on the use of IP rights in start-ups and to the literature on new venture strategy.

IP & Litigation

Recalibrating patent venue

Colleen V. Chien (Santa Clara University – School of Law)
Michael Risch (Villanova University Charles Widger School of Law)
Santa Clara Univ. Legal Studies Research Paper No. 10-1
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2834130

For most of patent law's 200-year plus history, the rule has been that patentholders are permitted to sue defendants only in the district they inhabit. In 1990, the Federal Circuit changed this by enlarging the scope of permissible venue to all districts with personal jurisdiction over the defendant. Since then, patentees have flocked to fewer districts, and in 2015, brought more than 40% of their cases in a single rural district with 1% of the US population, the Eastern District of Texas. Fueled in particular by concerns that non-practicing entities (NPEs), who bring the majority of cases in the Eastern District, are abusing venue, several pending Congressional bills and the TC Heartland case, potentially headed for Supreme Court review, could reinstate a more restrictive rule. We add to the policy discussion by reporting on a novel analysis of ~1,500 patent and non-patent cases filed in 2015, to explore how filing patterns might be impacted under different versions of the law. We find that about 86% of 2015 patent cases were

brought outside of the defendant's home district (principal place of business), a strikingly high share. Things would change if venue were reformed, but the specifics vary. If the courts decided to restrict venue to where defendant resides or has an established place of business, an estimated 58% of 2015 cases would have had to been filed in a different venue. Plaintiffs of all types would be impacted, though NPEs would be impacted more. If venues that the plaintiff has filed in in the past few years are included (familiar districts), the shares of required refilings would drop to 53%. But if Congress decides that cases can also be filed in home districts with research or manufacturing connections to the case, about half the NPE cases in our sample would have to be refiled in an unfamiliar district, but only 14% of the operating company cases would.

A tale of two layers: patents, standardization, and the internet

Jorge L. Contreras (University of Utah – S.J. Quinney College of Law)
Denver University Law Review, Vol. 93, No. 4, 2016
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2832538

In recent years, high-profile lawsuits involving standards-essential patents (SEPs) have made headlines in the United States, Europe, and Asia, leading to a heated public debate regarding the role and impact of patents covering key interoperability standards. Enforcement agencies around the world have investigated and prosecuted alleged violations of competition law and private licensing commitments in connection with SEPs. Yet, while the debate has focused broadly on standardization and patents in the information and communications technology (ICT) sector, commentators have paid little attention to differences among technology layers within ICT.

This Article uses both existing and new empirical data to show that patent filing and assertion activity is substantially lower for Internet-related standards than for standards relating to telecommunications and other computing technologies. It analyzes historical and social factors that may have contributed to this divergence focusing on the two principal Internet standards bodies: the Internet Engineering Task Force (IETF) and the World Wide Web Consortium (W3C). It counters the dominant narrative that standards and SEPs are necessarily fraught with litigation and thereby necessitate radical systemic change. Instead, it shows that standards policies that de-emphasize patent monetization have led to lower levels of disputes and litigation. It concludes by placing recent discussions of patenting and standards within the broader context of openness in network technologies and urges both industry participants and policy makers to look to the success of Internet standardization in a patent-light environment when considering the adoption of new rules and policies.

Disrupting the balance: the conflict between Hatch-Waxman and Inter Partes Review

Joanna Shepherd (Emory University School of Law)
NYU Journal of Intellectual Property & Entertainment Law, Forthcoming
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2838236

For patents in most industries, Inter Partes Review (IPR) offers a new, efficient alternative pathway to challenge patents of dubious quality. However, for pharmaceutical patents, IPR is a means to avoid the litigation pathway created under Hatch-Waxman over thirty years ago. This Article explains that critical differences between district court litigation in Hatch-Waxman proceedings and IPR jeopardize the delicate balance Hatch-Waxman sought to achieve between patent holders and patent challengers. As IPR has grown in popularity, it has become evident that these proceedings favor patent challengers; compared to district court challenges, patents are twice as likely to be found invalid in IPR challenges.

In recent decisions, courts have recognized the anti-patentee bias of IPR, yet punted to Congress the job of changing the provisions. It is critical that Congress reduce the disparities between IPR proceedings and Hatch-Waxman litigation. The high patent invalidation rate in IPR proceedings creates significant

uncertainty in intellectual property rights. Uncertain patent rights will, in turn, disrupt the nature of competition in the pharmaceutical industry, drug innovation, and consumers' access to life-improving drugs.

IP Law & Policy

Intellectual property, antitrust, and the rule of law: between private power and state power

Ariel Katz (University of Toronto – Faculty of Law)
17:2 Theoretical Inquiries in Law 633 (2016)
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2830611

This Article explores the rule of law aspects of the intersection between intellectual property and antitrust law. Contemporary discussions and debates on intellectual property (IP), antitrust, and the intersection between them are typically framed in economically oriented terms. This Article, however, shows that there is more law in law than just economics. It demonstrates how the rule of law has influenced the development of several IP doctrines, and the interface between IP and antitrust, in important, albeit not always acknowledged, ways. In particular, it addresses some limitations on IP rights, such as exhaustion and limitations on tying arrangements, are grounded in rule of law principles restricting the arbitrary exercise of legal power, rather than solely in considerations of economic efficiency.

The historical development of IP law has reflected several tensions, both economic and political, that lie at the heart of the constitutional order of the modern state: the tension between the benefits of free competition and the recognition that some restraints on competition may be beneficial and justified; the concern that power, even when conferred in the public interest, can often be abused and arbitrarily applied to advance private interests; and the tension between freedom of contract and property and freedom of trade. This Article explores how rule of law considerations have allowed courts to mediate these tensions, both in their familiar public law aspects but also in their less conspicuous private law dimensions, and how, in particular, they have shaped the development of IP doctrine and its intersection with antitrust law and the common law.

Overclaiming is criminal

Oskar Liivak (Cornell Law School)
Cornell Legal Studies Research Paper No. 16-35
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2836165

For some time patent law has been criticized for a flood of bad patents. Patents of questionable validity are being issued with broad often-nebulous boundaries. A majority of the blame for these bad patents has fallen on the shoulders of the Patent and Trademark Office (PTO). Bad patents exist, so the argument goes, because the PTO has improperly issued them. In response the PTO has launched a major initiative to improve patent quality. Our singular focus on the PTO though threatens to overlook the other major player responsible for patent quality – patent applicants. Currently patent applicants are not seen as having any particular duty to seek only good patents. Today applicants can seek excessively broad claims if they want to. It is the PTO's job to police against such excessive claims. This article shows this prevalent practice of overclaiming is dangerously mistaken. Though not generally appreciated, the patent statute includes powerful features that put a significant duty on applicants and their patent attorneys to file only properly sized patent claims. As shown, applicants have a duty to file claims that do not exceed their invention. And though it likely comes as a surprise to much of the patent bar, that duty is enforced by criminal sanctions. Simply put, willful overclaiming is criminal; it is a felony.

Copyright Law

Charting the contours of a copyright regime optimized for engineered genetic code

Christopher M. Holman (University of Missouri – Kansas City School of Law)
Oklahoma Law Review
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2833948

There is a growing disconnect between the traditional patent-centric approach to protecting biotechnological innovation and the emerging intellectual property imperatives of “synthetic biology,” a promising new manifestation of biotechnology that enables the design and construction of artificial biological pathways, organisms or devices, as well as the redesign of existing natural biological systems. As explained in previous articles, one way to deal with this disconnect would be to expand the scope of copyrightable subject matter to encompass engineered genetic sequences, much in the way that copyright was expanded in the 1970s and 1980s to include computer programs. The present article expands upon that work and explores the possible contours of a copyright regime encompassing engineered genetic code (EGC), explaining how a policy-optimized application of existing copyright doctrine, facilitated perhaps by some relatively conservative amendments to the Copyright Statute, could provide synthetic biologists with a beneficial supplement to patents, while at the same time addressing legitimate concerns that have been raised in response to this proposal. The use of the term “EGC,” as opposed to “DNA,” is intended to focus the attention where it rightly belongs, i.e., on the information content encoded by a synthetic genetic sequence, and to make clear that I am in no way proposing that naturally-occurring DNA sequences should be copyrighted. It also highlights the close analogy between computer code and engineered DNA sequences. The article includes a description of a recent attempt to register an engineered genetic sequence as a copyrighted work with the U.S. Copyright Office.

Other IP Topics

Disclosing designs

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Mark D. Janis (Indiana University Maurer School of Law)
Vanderbilt Law Review, Forthcoming
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2834125

While patent scholars have subjected disclosure doctrines to considerable scrutiny in the context of utility patent law, very little has been written about the role of those doctrines in design patent law. At first blush, this is not surprising: modern design patent documents usually contain short disclosures comprised primarily of drawings, accompanied by very little text. Although this might suggest limited aspirations for design patent disclosures, the story is more complex. Design patents contain only a pro forma claim; it is the disclosure that defines the scope of the protected design. Moreover, although the modern practice of relying primarily on visual disclosure (and a mere pro forma claim) is well-established, many early design patents relied heavily on textual disclosure and plural claiming. In this paper, we present the results of new historical and empirical research on disclosure practice in design patents. We use this research as a basis for examining the role of disclosure in early design patent practice, and critiquing some modern decisions applying disclosure doctrines to design patents.

A prescription for excessive drug pricing: leveraging government patent use for health

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Amy Kapczynski (Yale University – Law School)
Christine H. Monahan (Independent)
Zain Rizvi (Yale University – Law School, Students)
18 Yale J. L. & Tech. 275 (2016)
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2832948

High drug prices are creating serious health and fiscal problems in the United States today. This reality is vividly illustrated by recently approved medicines to treat Hepatitis C. These new medicines can cure nearly everyone with this potentially fatal infection and may even enable the elimination of this disease. But the drugs' sticker price — close to $100,000 — has meant that very few patients who could benefit from them can access them. This Article describes an approach, available under existing law, to bring about transformative reductions in the prices of these medicines, at least for federal programs and possibly beyond. Under 28 U.S.C. § 1498, the U.S. government can buy generic versions of these medicines at less than 1% of their list price plus a reasonable royalty. This power has received almost no academic attention, despite the fact that it is regularly used by the government in other sectors, including defense. Indeed, though it has now been forgotten, the federal government relied on this provision numerous times to procure cheaper generic drugs in the 1960s. We recover this history and show how § 1498 can once again be used to increase access to life-saving medicines, addressing several important interpretive questions about the application of the provision along the way. We also offer the first sustained efficiency defense of this approach. This power, we show, can be analogized to the eminent domain power over land and similarly justified as a means to address hold out problems. We show that courts or agencies can fashion damages remedies that provide robust returns to investment, and so protect dynamic incentives while permitting radical improvements in static efficiency. Our remedy involves some risk, as do all policy innovations. But the status quo is so deeply dysfunctional — with millions of Americans unable to benefit from medicines that could halt the spread of a major disease — that the case for action is overwhelming.

Comparative patent quality

Colleen V. Chien (Santa Clara University – School of Law)
Santa Clara Univ. Legal Studies Research Paper No. 0216
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2833980

One of the most urgent problems with the US patent system is that there are too many patents of poor quality. Most blame the US Patent and Trademark Office (USPTO) – its mistakes, overly generous grant rate, and lack of consistency. But, the quality and quantity of patents in force is the product of three sets of decisions: to submit an application of certain quality (by the applicant), to grant the patent (by the patent office), and to renew a patent and keep it in force (by the applicant/patentee). Startling, there is no consensus way to measure patent quality. This article addresses these shortcomings by developing new, comparative ways to measure patent quality, using the benchmark of the European Patent Office (EPO), viewed as the "gold standard" for patent quality. Tracking the progress of patent submissions, grants, and renewals, including of close to 100,000 applications filed at both the EPO and USPTO, it reveals subtle and thus far overlooked differences with implications for how the US should implement and prioritize improvements to patent quality.

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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