



IP Literature Watch

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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 pools and related technology sharing

Herbert J. Hovenkamp (University of Iowa – College of Law)

Erik N. Hovenkamp (Northwestern University, Department of Economics)

Working paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2645905

A patent "pool" is an arrangement under which patent holders in a common technology commit their patents to a single holder, who then licenses them out to the original patentees and perhaps also to outsiders. The payoffs include both revenue earned as a licensor, and technology acquired by pool members as licensees. Public effects can also be significant. For example, technology sharing of complementary patents can improve product quality and variety. In some information technology markets pools can prevent patents from becoming a costly obstacle to innovation by clearing channels of technology transfer. By contrast, a pool's aggregate output reduction or price fixing in a product market can produce cartel profits.

A traditional justification for patent pools is that they facilitate improved products by uniting complements. Sharing of complementary patents means that licensees can then employ all the patents in their product, rather than creating silos in which each manufacturer incorporates only its own patented features. Pools created for this purpose can reduce problems of royalty stacking and holdup, as well as problems involving blocking patents. A more robust explanation for pooling in many markets comes out of the economics of transaction costs, which emphasizes the role of limited information and the costs of obtaining it, as well as uncertainty in bargaining and sharing. Pooling is an efficient solution to problems of technology development and transfer when determining patents' validity or identifying their boundaries is costly. In this sense, patent pools function much as traditional common pool resources.

An individual patent's boundaries distinguish its protected technological embodiments from noninfringing technology. But when multiple patents are aggregated what really matters are the outer boundaries that separate the portfolio as a whole from outside patents or the public domain. So long as the relevant rights are somewhere in the portfolio, the parties do not need to delineate the boundaries of individual patents in order to strike a deal. While most patent pools are socially beneficial, certain practices or structures can pose competitive problems. The biggest antitrust risk from pooling is collusion, and its threat depends on two things. First is the market structure and the power of the pool within its market. Second is the nature of pricing and exclusivity arrangements within the pool. Pool "exclusivity" can take several forms. First, it can refer to the contract that each licensor has with the pool, asking whether that licensor is free to license to others outside of the pool. Second it can refer to the pool's willingness as licensee to accept an offered technology from an outsider for inclusion in the pool. Third it can refer to the pool's willingness as licensor to license to outsider manufacturers. Fourth, it can refer to field-of-use or other restrictions given to licensees from the pool.

A large but inconclusive literature considers the relationship between pooling and innovation. Conclusions are sensitive to assumptions about patent strength and quality, about the relationship among the patents in a pool and the strength of alternatives outside the pool, about the impact on innovation of insiders vs. outsiders to the pool, and finally, about the strategic responses of participants. Most of the literature concludes that most pools increase innovation rates. A pool should increase the demand for innovation of complements to the pool. First of all, access to the existing technology by pool members should be guaranteed and cheaper. To the extent the pool reduces licensing costs and eliminates royalty stacking the cost of further improvements should decline. When innovation is cumulative the development of new technology may require the licensing of existing technology with multiple patent holders. Pooling can reduce these costs and thus facilitate cumulative innovation.

The economic rationale of exhaustion: distribution and post-sale restraints

Ariel Katz (University of Toronto – Faculty of Law)

The Economic Rationale of Exhaustion: Distribution and Post-Sale Restraints, in Research Handbook on IP Exhaustion and Parallel Imports, Irene Calboli & Edward Lee, eds., 2016, Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2649272

Despite over a hundred years of adjudication, courts have never been able to draw the exact contours of the first sale doctrine or fully articulate its rationale. In recent years, insights borrowed from modern antitrust law and economics have been applied to suggest that just as that just as antitrust law has recognized the efficiency of post-sale restraints and relaxed its hostility toward them, so should IP law permit their imposition and provide remedies for their breach.

This Chapter challenges this position. It shows that the main benefits of post-sale restraints involve situations of imperfect vertical integration between coproducing or collaborating firms, which occur during the production and distribution phases or shortly thereafter. In such situations, contracting out of the first sale doctrine should be permitted. Beyond such limited circumstances, however, the first sale doctrine promotes important social and economic goals: it promotes efficient use of goods embodying IP, guarantees their preservation, and facilitates user innovation, while minimizing transaction costs that otherwise might impede those goals. Therefore, rather than undermining it, the economics of post-sale restraints confirm the validity of the first sale doctrine and support its continued vitality.

IP & Innovation

Intellectual property protection and financial markets: patenting vs. secrecy

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Vikram K. Nanda (University of Texas at Dallas – School of Management – Department of Finance & Managerial Economics)

Steven Chong Xiao (University of Texas at Dallas – Naveen Jindal School of Management)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2648770

Firms can protect intellectual property (IP) either by keeping inventions secret or by patenting the IP, which entails detailed information disclosure. Our hypothesis is that the firm's choice between secrecy and patenting is influenced by the relative protection provided, which then has distinct implications for stock liquidity and equity financing. Stronger IP-protection through trade secrets (patents) is expected to encourage firms to rely more (less) on secrecy, thus increasing (reducing) information asymmetry and stock illiquidity. Our empirical findings are supportive: exogenous, staggered passage of state-level statutes that strengthen trade-secret protection result in: fewer patent applications, increased opaqueness, greater stock illiquidity, and worse announcement reaction to seasoned equity offerings (SEOs). By contrast, implementation of the international Agreement on Trade-Related Aspects of Intellectual Property Rights (a.k.a. TRIPS), that strengthened patent-protection, is followed by an increase in patenting, enhanced transparency, greater stock liquidity, and a less negative stock-market reaction to SEOs.

Competition and innovation in automobile markets

Vivek Ghosal (Georgia Institute of Technology; Center for Economic Studies and Ifo Institute for Economic Research (CESifo))

Jiayao Ni (Georgia Institute of Technology – School of Economics)

Working paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2650020

Using data from the U.S. automobile market, we empirically examine the link between competition and innovation. Consistent with a large literature, we use patent counts as a measure of innovation. The combination of the U.S. market's economic importance, market dynamics, and the significant intertemporal fluctuations in firms' market shares and patents make this an interesting market to examine the link between competition and innovation. We use firm-level time-series data over a long horizon (1969-2012) for nine well established firms selling in the U.S. market (GM, Ford, Chrysler, Toyota, Honda, Nissan, Volkswagen, BMW, and Daimler). Some of our key findings are: (1) increase in firms' market shares result in higher patenting, and the relationship is reasonably non-linear; (2) higher market-wide competition results in an increase in patenting, and the relationship is weakly non-linear; (3) the (absolute) quantitative impact on patents is larger for firms' market share effect as compared to market-wide competition; (4) there is relatively strong path-dependence in firms' patenting behavior; and (5) we find interesting results linking patents to GM's bankruptcy, the Daimler-Chrysler merger, environmental regulations, voluntary export restraints, and firms' patenting over business cycles.

IP & Litigation

The conceptual relation between IP rights and infringement remedies

Eric R. Claeys (George Mason University)

George Mason Law Review, Vol. 22, No. 4, pp. 825–864, 2015

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2650134

This Essay contributes to a symposium held at George Mason University, and sponsored by GMU's Center for the Protection of Intellectual Property, on the common ground between creators and inventors in intellectual property. The Essay focuses on the legal concepts involved in remedy determinations in copyright and patent infringement suits. In its 2006 decision *eBay v. MercExchange*, the U.S. Supreme Court handed down a decision widely viewed as weakening the relationship between a judgment of infringement and the entry of an injunction prohibiting the infringement. The opinions in the Supreme Court and lower courts joust about how the property in a patent relates to the remedies for infringement. Much scholarly commentary on the *eBay* decision follows Calabresi and Melamed's 1972 'Cathedral' article and studies infringement remedies using the vocabulary of property rules and liability rules.

Both the judicial opinions and the Cathedral-inspired scholarly commentary make problematic conceptual assumptions about the meanings of: property, infringement, injunctive relief, and awards limiting prevailing infringements to money damages. This Essay recounts relevant conceptual-philosophy scholarship critiquing the conceptual assumptions about remedies made in the Cathedral framework. The Essay adapts those prior critiques to account for the special features of small-component/large-assembly undue hardship arguments in property disputes, and applies those critiques so adapted to *eBay*-related issues.

When soundly conceived, a 'property right' consists of a right of exclusive use over an asset. Such a right gives a proprietor presumptive freedom to dispose of the asset as she likes, but that freedom may be limited in cases in which the asset gets justifiably entangled with the labor or property of others. Orders of injunctive relief and damages-only awards specify the circumstances in which the owner retains her disposition rights and the ones in which she claims more control over disposition than her exclusive use entitles her to. Several of the judicial opinions in *eBay* misstated these concepts by portraying the property in patents as a 'right to exclude'; this portrait makes property rights seem broader and more likely to generate injunctive relief than they are in social concepts or practice. The Cathedral-inspired commentary portrays damages-only awards as 'liability rules'; this portrait misstates the conceptual character of damages-only awards, and does so in ways that obscure the normative influence that 'property' can have in remedy determinations.

Investing in legal advice – what determines the costs of enforcing intellectual property rights?

Steffen Juraneck (Norwegian School of Economics (NHH) – Department of Business and Management Science)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2636274

This paper studies the determinants of investment in legal advice by plaintiffs in patent litigation. A hand-collected sample of US patent litigation cases is used to identify the empirical factors that determine the

number of legal counsels employed by the plaintiffs. It turns out that more valuable patents lead to a higher investment in legal advice. Large firms, and plaintiffs with large patent portfolios employ more counsels, whereas individual litigants employ fewer. Software patents are related to a lower investment by the plaintiffs. These findings help not only to understand the cost drivers of litigation but have also important implications for the discussions on software patents, and the role of the litigant status for litigation success.

The integrated patent instrument

Christopher Funk (Independent)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2643045

Inventors who apply for a patent at the U.S. Patent and Trademark Office (PTO) routinely negotiate with the PTO over the patent's scope. The written record of that negotiation is called the prosecution history. For the past three decades, courts have held and many scholars have assumed that this written record is intrinsic evidence to a patent. The U.S. Court of Appeals for the Federal Circuit reviews de novo a trial court's findings based on that prosecution history when construing the scope of a patent — as if such findings were pure determinations of law — because it considers that history intrinsic evidence. The U.S. Supreme Court recently adopted the Federal Circuit's approach to prosecution history for the first time in *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.* By doing so, the Court perpetuated a review system that encourages appeals, discourages settlement, and prolongs expensive litigation when trial courts determine the outcome of a case based on a prosecution history. In short, de novo review of that history foments litigation and taxes innovators.

This Article argues that treating prosecution history as intrinsic evidence is incorrect in concept and inconsistent with a patent as an integrated legal instrument. Instead of the prevailing view, this Article suggests that contract principles provide a coherent paradigm through which courts and scholars can understand a patent and its history. Those principles frame patents as integrated instruments, prosecution histories as extrinsic evidence, and findings based on those histories as determinations of fact, not law. This paradigm suggests a sea change in how the Federal Circuit should review patent constructions — namely, the court should review findings based on prosecution histories for clear error only, like other factual questions, not de novo, like pure questions of law. By reviewing such findings for clear error, the Federal Circuit can discourage appeals and thereby reduce costs in cases where factual inquiries based on the prosecution history drive the final construction of a patent.

IP Law & Policy

Intellectual property incentives: economics and policy implications

Stephen M. Maurer (University of California, Berkeley)

Rochelle Dreyfus & Justine Pila (eds.). The Oxford Handbook of Intellectual Property Law, Oxford University Press (2016, Forthcoming)

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2635824

Classical proofs for the efficiency of markets do not extend to information goods. Economists have worked since the 1960s to construct sophisticated microeconomic framework for analyzing when

intellectual property (“IP”) rights benefit to society. This chapter reviews IP theory's main findings and asks how well they have been implemented in US law. Section III begins by reviewing how IP mediates the benefits of faster innovation against the burden of monopoly. It then shows why IP is generally less efficient when multiple firms compete and how shrewd reforms could improve the tradeoff. Finally, it explores extended models in which ideas for R&D investments are scarce so that IP incentives must coordinate contributions by firms that may not know of each others' existence. Section III asks how well legislators and judges have incorporated these insights into everyday patent, antitrust, and copyright law. Section IV presents a brief conclusion.

Investor-state dispute settlement mechanism and intellectual property matters

Apoorva Sharma (SMAS Intellectual Property)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2645198

The proposed IP and Investment Chapters in the Trans-Pacific Partnership Agreement (TPP) and the recent North American Free Trade Agreement (NAFTA) investor dispute notifications by Eli Lilly against Canada has initiated the discussion concerning the impact of introducing intellectual property rights (IPR) in the purview of investment chapters of trade agreements. In this paper we will try to examine the effect of treating IP as an investment in the trade agreements and utilization of ISDS to resolve IP matters by way of analyzing the IPR cases that have been brought before the courts by the foreign investors in various countries.

Understanding the Federal Circuit: an expert community approach

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30 Berkeley Technology Law Journal 89 (2015)

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2639781

The Court of Appeals for the Federal Circuit (“CAFC”) — the appeals court in charge of virtually all patent cases — has been fraught with controversy since its creation in 1982. To its critics, the Federal Circuit engages in puzzling behaviors, out of step with its role as an Article III appellate court. The Federal Circuit shows little deference to district courts on questions of fact and to the Patent and Trademark Office (“PTO”) on technical issues. It surprisingly resorts to formalistic rules in an area of the law that requires flexibility to adapt to changing technological landscapes. These criticisms have become increasingly salient, leading to calls for an end to the Federal Circuit’s exclusive jurisdiction over patent appeals. Several explanations have been put forth to account for these puzzling behaviors. Yet, none can fully explain the range of unique Federal Circuit conduct. Without a full explanation for Federal Circuit behavior, however, the debate over Federal Circuit jurisdiction will remain gridlocked.

Drawing upon studies from the sociology of expertise, this Article provides a model of Federal Circuit decision-making that explains and predicts Federal Circuit behavior as a product of four distinct but interrelated expert community features: (1) epistemic control, (2) codification, (3) typecasting, and (4) inability to self-coordinate. The drive that expert communities exhibit for maximal control and autonomy over their knowledge base — referred to as epistemic control — explains why the Federal Circuit is less likely to defer to solutions proposed by other expert communities, such as the PTO, than would be expected of generalist courts. Those motivations also predict that expert communities such as the Federal Circuit will be more likely to defy non-expert superior generalists, such as the Supreme Court,

than would be expected under traditional accounts of behavior in judicial hierarchies. The codification feature of expert communities gives a richer account than existing narratives of when and why the Federal Circuit may prefer inflexible rules of decision over flexible standards. It predicts that the Federal Circuit will resort to rules not only to simplify technical knowledge or control subordinate communities, but also to build external legitimacy and manage internal dissent. Normatively, this model offers a path out of the gridlock by revealing a framework to evaluate and design proposals for Federal Circuit reform. To minimize the distortive effects of typecasting in the context of a centralized court, while retaining the advantages of expertise, this Article proposes the use of advisory panels to house technological, sociological, and economic expertise. Additionally, the model has important implications beyond the Federal Circuit, as it provides a novel theoretical lens to analyze the behavior of other specialized courts.

Copyright Law

Notice and remedies in copyright licensing

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80 Mo. L. Rev. 313 (2015)

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2635748

Copyright owners claim the power to designate practically any term of a copyright license as a “condition” enforceable in copyright. In doing so, these licensors purport to translate breach of the most trivial or idiosyncratic term into the basis for a copyright infringement suit. This Article argues that these licenses are most problematic when licensors provide inadequate notice of unexpected terms. License conditions are typically buried in boilerplate that no reasonable consumer reads, and licensors have few incentives to make them more salient. These circumstances not only threaten unwitting users with copyright liability, but also impede copyright’s own goals by casting doubt on the legitimacy of the copyright regime and discouraging the public’s engagement with creative works. Copyright law nonetheless offers courts no effective tools to inquire into the adequacy of notice.

Because these agreements arise at a unique intersection of copyright and contract, however, contract law supplies a normative and doctrinal framework that allows courts to demand more effective notice. Contract law is skeptical of supracompensatory remedies – like those that would follow from enforcement of a license condition – and awards them only where understanding and assent are clear. Courts therefore ought to require a heightened standard of notice as a prerequisite to the enforcement of license terms in copyright. This approach would check against licensors’ overreaching. At the same time, it would leave room for parties to experiment with unusual but potentially beneficial licensing arrangements like those championed by the free culture and free software movements. By bringing novel licensing arrangements to light, moreover, this approach subjects licenses to public scrutiny and to discipline through market and political forces.

IP & Asia

Is competition law the analgesic for the Indian healthcare sector?

Murali Neelakantan (Independent)

National Law School of India Review (NLSIR), Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2640398

Competition law in India has not yet found a way of creating an impact on the healthcare sector. As a result, its effect on regulating the monopolistic power of IPR is yet to be seen. The paper explores the impact of trade dress, trade mark, the manner in which medicines are prescribed and bought in India to identify how these extend the patent monopoly beyond 20 years. Would limiting copyright, trade mark and trade dress protection for the term of the patent improve competition by generics? There is a need for better market data and better understanding of the healthcare market from a competition law perspective.

Antitrust regulation of intellectual property rights in China

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Working paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2648736

This article reviews the practice of competition agencies, including NDRC, Mofcom and SAIC, and courts in China regarding the application of antitrust law to intellectual property rights related anti-competitive conduct. It covers all the cases and regulations coming out after the adoption of China's Anti-monopoly Law. Although China has progressed considerably in this domain, there are still some imperfections.

Other IP Topics

Adjustments, extensions, disclaimers, and continuations: when do patent term adjustments make sense?

Stephanie Bair (Brigham Young University J. Reuben Clark Law School)

Capital University Law Review, Vol. 41, No. 3, 2013

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2637549

The United States patent system represents a measured trade-off between two competing policy considerations: providing sufficient incentives to encourage the innovation and development of new and socially useful inventions; and ensuring that such inventions are readily available to the public at an affordable price. Although the default patent term is now twenty years from filing, various features of, and changes to, the patent system over the years have allowed patent owners to extend the duration of their patent monopolies, sometimes for several years. Such extensions, though seemingly insignificant when compared to the full patent term, have an enormous impact on patent holders, their competitors, and the public. In some cases, an extension merely corrects a deficiency in the patent balancing system and ensures equilibrium between incentives and access. In other cases, however, an extension may result in a socially harmful enlargement of the patent holder's monopoly, allowing the patentee to collect a windfall beyond what was necessary to incentivize the invention's development, while stifling competition and depriving the public of affordable access to the invention. In all cases, these extensions delay competition

and access while introducing uncertainty about the expiration of the patent. It is thus beneficial to distinguish situations where extensions are justified to provide adequate research and development incentives from situations where extensions are not justified. This Article clarifies the current law governing the various forms of patent extensions and their interactions, and evaluates this law from a policy perspective.

Trademark laundering, useless patents, and other IP challenges for the marijuana industry

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U Denver Legal Studies Research Paper No. 15–43

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2646162

Marijuana law is changing rapidly in the United States today – since 1996, 23 states and the District of Columbia have legalized medical marijuana and five jurisdictions have made marijuana legal for all adults. Because marijuana remains a prohibited substance under federal law, however, the states are significantly limited in their ability to control marijuana policy within their borders. For example, because banking is regulated by the federal government, state-licensed marijuana businesses cannot gain full access to banking services; because bankruptcy is a federal benefit, it is unavailable to those involved in the business of violating federal law.

This article examines the implications for marijuana businesses of another area of federal regulation that has heretofore escaped academic commentary: federal intellectual property law. The continuing federal marijuana prohibition means that the most relevant federal intellectual property protections – trademark and patent – are largely unavailable for most marijuana businesses. While they are bound to comply with the dictates of trademark and patent law in their own affairs, marijuana businesses cannot acquire the rights and benefits of those laws or invoke those doctrines against others.

We discuss the ways in which these businesses attempt to circumvent the unavailability of patent and trademark rights, often through reliance on state law doctrines which generally prove insufficient to meet their needs. We also discuss the unexpected natural experiment that the current conflict between state and federal law creates. It is often asserted that intellectual property protections are necessary to foster creativity and investment. Yet the marijuana industry has seen extraordinary innovation and capital formation, even as these ostensibly necessary protections have proven unavailable. We conclude by discussing the implications of this observation for federal intellectual property law and policy more generally.

About the editor

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