



IP Literature Watch

CRA Charles River
Associates

December 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

Whither symmetry? Antitrust analysis of intellectual property rights at the FTC and DOJ

Joshua D. Wright (George Mason University School of Law)

Douglas H. Ginsburg (George Mason University School of Law)

Competition Policy International, Vol. 9, No. 2, Forthcoming Fall 2013

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2365577

In modern antitrust law, intellectual and other forms of property have been treated symmetrically as a matter of principle. Recent actions by the Federal Trade Commission and Antitrust Division of the Department of Justice, however, sound a departure from this salutary principle of symmetry. In this paper, we describe and defend the principle against the recent barrage of agency testimony and enforcement actions discouraging holders of standard essential patents from pursuing preliminary injunctions or exclusion orders; arguing that breach of a FRAND commitment constitutes an antitrust violation; and tightening merger review involving standard essential patents.

The myth of the early aviation patent hold-up – How a US Government monopsony commandeered pioneer airplane patents

Ron D. Katznelson (Bi-Level Technologies)

John Howells (University of Aarhus)

Industrial and Corporate Change, 2014, Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2355673

The prevailing historical accounts of the formation of the U.S. aircraft “patent pool” in 1917 assume the U.S. Government necessarily intervened to alleviate a patent hold-up among private aircraft manufacturers. We show these accounts to be inconsistent with the historical facts. We show that despite the existence of basic aircraft patents, aircraft manufacturers faced no patent barriers in the market dominated by Government demand. We show that the notion of the aircraft patent hold-up is a myth created by Government officials and used to persuade Congress to appropriate funds for eminent domain condemnation of basic aircraft patents. Government officials used the threat of condemnation to impose a depressed royalty structure on aircraft patents and induce key patent owners to enter a cross-licensing

patent pool. We show that this cross-licensing agreement was not an archetypical private patent pool, but had been structured to suit the preferences of the Government as monopsonist; it imposed on private suppliers to the Government a nearly costless technology transfer.

Reverse payments: life after Actavis

Daryl Lim (The John Marshall Law School)

International Review of Intellectual Property and Competition Law (IIC), Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2360795

On its face, the United States Supreme Court's opinion in *Federal Trade Commission (FTC) v. Actavis* seemed to contain the elements of a straightforward antitrust indictment: a dominant drug company paid potential rivals millions of dollars not to compete at the cost of public access to cheaper medicine. The interests of these rivals, once aligned with those of the public, have been twisted to align with its former rival and current paymaster. According to an FTC report, these settlements cost consumers \$3.5 billion a year.

The Court likened these settlements to cases involving market division arrangements, hardcore offenses normally weeded out under a *per se* standard of illegality. However, it ultimately opted for a rule of reason approach. Lower courts were to balance benefits and anticompetitive harms, taking into consideration the size and scale of the payment in relation to the patent owner's anticipated litigation costs and any auxiliary services it received from the generic drug company. Large and unexplained payments could be used as a proxy for market power and anticompetitive harm, sparing lower courts the need for complex, costly and time-consuming inquiries into issues of patent validity and infringement. While the Hatch-Waxman Act makes it lucrative for generic challenges to induce settlements, the fact that the European Union faces similar issues in cases such as *Lundbeck*, *Les Laboratoires Servier* and others even without similar legislation is evidence that reverse payments occur outside the setting of the Act.

Looking ahead, parties to a reverse payment will need to negotiate with a view that their agreement will be scrutinized by antitrust agencies and courts. Since at least 2005, settlements have evolved beyond cash payments to include other forms of consideration. Courts must now articulate how cross-licensing, service agreements and offers to delay authorized generic launches are to be assessed. Carelessly applied, Actavis could open litigation floodgates, dampening R&D by current and prospective patent owners. With the prospect and payoffs of settlement now tightened, generics could also be less willing to develop cheaper alternatives or challenge patents to bring such alternatives to market. In the United States where patent litigation is considerably higher than in Europe, these risks are more real and the consequences more dire.

Beyond reverse payments, Actavis provides a rare and precious opportunity to move the dialogue on the interface between the patent and antitrust laws beyond mere platitudes. Most patent and antitrust stakeholders agree that both regimes seek to promote competition and innovation. An enduring disagreement remains, however, as to how these goals should be operationalized. The fierce rift between the majority and dissent vividly illustrates this: should we give primacy to visible marketplace rivalry or allow more latitude for private ordering between the settling parties?

The true legacy of Actavis lies in the promise of catalyzing those from the patent and antitrust spheres into moving towards a realistic compromise on how the rules that affect them both should look like and function. Through debate, experimentation and refinement innate in the common law, future cases can craft pieces that will form a coherent analytical framework for the interface between patent and antitrust laws. The effort must be supported by constituents clear-headed enough to look beyond traditional

prejudices, who are able to translate economic insights into workable legal rules, and who recognize that failure would mean that law at the interface will look a lot like the current state of American politics – divided, dysfunctional and a hotbed for empty rhetoric.

Deconstructing the patent bubble: an exploration of patent monetization entities from Sewing Machine Combination to Rockstar Bid Co.

Nicole Ann Shanahan (Santa Clara University School of Law)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2359912

The question I address in this paper is whether or not the patent marketplace is developing in a sustainable way that rewards inventors and business people according to the aims of past and current patent policy. This paper addresses developments in the private patent marketplace from a historical perspective, and focuses on recent innovations in monetization models. The companies covered in this paper have all risen from the relative freedom under which the government has allowed them to operate, and their stories as well as their struggles explain the trends we see today and provide insight into where the patent marketplace is headed tomorrow.

A unified framework for competition policy and innovation policy

Keith N. Hylton (Boston University School of Law)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2367283

I describe a model of competition law enforcement that treats competition and innovation policy as the inseparable partners they ought to be. The enforcement authority determines an optimal punishment knowing that if it sets the penalty too high it will reduce firms' incentives to invest in innovation, and if firms do not invest, new goods and new markets will not be created. The authority therefore moderates the penalty in order to maintain innovation incentives. The implications of this framework for competition policy and for innovation policy are quite different from what is commonly observed today. I discuss implications for competition law enforcement, standard essential patents, and the Supreme Court's decision in *FTC v. Actavis*.

Does fragmented or heterogeneous IP ownership stifle investments in innovation?

Franz Schwegler (Centre for European Economic Research)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2356194

Thickets of partially overlapping patent rights raise costs to secure IPR for innovation. Fragmented IP ownership raises coordination costs to resolve mutual blockades. Inadvertent patent infringement poses the risk of fruits from investments to be exploited. A gap in economic commitment levels may be exploited if capital-intensive innovators have more invested application-specifically than inadvertently infringed IPR owners. I study whether fragmentation or heterogeneous capital-intensities among owners of overlapping patents affect propensities to invest in innovation. I find that firms with small patent portfolios are less likely to invest in innovation if IPR is fragmented. Firms with large patent portfolios are less likely to invest in innovation if cited patent owners have smaller stocks of fixed capital. This suggests that effects of patent thickets on innovation are not evenly spread among innovating firms.

IP & Innovation

Progress and competition in design

Mark P. McKenna (Notre Dame Law School)

Katherine J. Strandburg (New York University School of Law)

Stanford Technology Law Review, Vol. 18 (2014) (Forthcoming)

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2355445

This article, prepared for a symposium on Design Patents in the Modern World, argues that applying patent-like doctrine to design makes sense only if a design patent system is premised on a patent-like conception of cumulative progress that permits patent examiners and courts to assess whether a novel design reflects a step of some magnitude beyond the prior art. If there is a meaningful way to speak of an inventive step in design, then design patent doctrine should be based on that conception. If nonobviousness has no sensible meaning in design, then a patent system makes no sense for design. At present, however, design patent doctrine is in disarray because it is unmoored from any conceptual underpinnings. It goes astray primarily for two reasons. First, design patent law lacks a coherent concept for limiting the scope of its subject matter. While courts attempt to distinguish design patent from utility patent by interpreting the ornamentality requirement to rule out “functional” designs, this distinction has never proven to be a stable one. Second, design patent law errs by attempting to impose a nonobviousness requirement on primarily aesthetic expression. The copyright system long has rejected the very possibility of incentivizing aesthetic progress with such a “creative step” requirement because it has found no metric along which to measure aesthetic progress. It is no wonder that the design patent system’s attempt to impose such a requirement has been an utter failure.

Design patents are not needed to incentivize technological invention, because that kind of innovation is the subject of utility patent law. And because aesthetic expression is not susceptible of the same sort of “inventive step” judgment, progress in aesthetic expression is not appropriately incentivized by a patent-like system. If there is any type of cumulative progress to be sought in design it must therefore involve the intersection between aesthetics and utilitarian function. Aesthetics and utility intersect at the integration of form and function and that, we argue, is where design patents must be justified, if they can be justified at all. Once stated, this point is intuitively appealing. The integration of form and function is what distinguishes industrial design both from purely artistic expression (for which we have copyright) and from technological invention (for which we have utility patent). The converse also follows: If there is no workable means to assess the nonobviousness of a given design’s integration of form and function, there can be no sensible design patent system.

Dynamic protection of innovations through patents and trade secrets

Paul Belleflamme (CORE and Louvain School of Management, UCL)

Francis Bloch (French National Center for Scientific Research)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2363876

This paper analyzes the optimal protection strategy for an innovator of a complex innovation who faces the risk of imitation by a competitor. We suppose that the innovation can be continuously fragmented into sub-innovations. We characterize the optimal mix of patent and trade secrets when the innovator faces a strict novelty requirement and can only patent a fraction of the innovation once. We also study the optimal dynamic patenting policy in a soft novelty regime, when the innovator can successively patent different fragments of the process. We compare a regime with prior user rights, when the innovator can use the secret part of the process, even when it is patented by an imitator with a regime without prior user rights.

Patent value and citations: creative destruction or strategic disruption?

David Abrams (University of Pennsylvania Law School)

Ufuk Akcigit (University of Pennsylvania - Department of Economics)

Jillian A. Popadak (University of Pennsylvania - The Wharton School)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2355653

Prior work suggests that more valuable patents are cited more and this view has become standard in the empirical innovation literature. Using an NPE-derived dataset with patent-specific revenues we find that the relationship of citations to value in fact forms an inverted-U, with fewer citations at the high end of value than in the middle. Since the value of patents is concentrated in those at the high end, this is a challenge to both the empirical literature and the intuition behind it. We attempt to explain this relationship with a simple model of innovation, allowing for both productive and strategic patents. We find evidence of greater use of strategic patents where it would be most expected: among corporations, in fields of rapid development, in more recent patents and where divisional and continuation applications are employed. These findings have important implications for our basic understanding of growth, innovation, and intellectual property policy.

Patent- and innovation-driven performance in venture capital-backed IPOs

Jerry Cao (Singapore Management University - Lee Kong Chian School of Business)

Fuwei Jiang (Singapore Management University - Lee Kong Chian School of Business)

Jay R. Ritter (University of Florida - Department of Finance, Insurance and Real Estate)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2364668

We study the effect of patents as a proxy for innovation on the long-run performance of Venture Capital (VC)-backed initial public offerings (IPOs). VC-backed IPOs with successful patent filings prior to the IPO substantially outperform those without patent filings, with 3-year buy-and-hold market-adjusted returns of -4.5% vs. -27.1%. On average, VC-backed IPOs without successful patent filings perform similarly to non-VC-backed IPOs. VC-backed IPOs from 1981-1998 outperformed other IPOs, but the pattern has reversed for IPOs from 1999-2006.

Does the mobility of R&D labor increase innovation?

Ulrich Kaiser (University of Zurich)

Hans Christian Kongsted (University of Copenhagen - Department of Economics)

Thomas Rønde (University of Copenhagen - Department of Economics)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2360203

We investigate the effect of mobility of highly skilled workers in Denmark on the total patenting activity of the firms involved for the population of R&D active Danish firms observed between 1999 and 2004. Our study documents how workers joining increase firms' patenting activity. The effect is strongest if workers join from patent-active firms. We also find evidence of a positive feedback effect on patenting from workers who have left for another patent-active firm. Summing up the effects of joining and leaving workers, we show that labor mobility increases the total innovative activity of the new and the old employer. Our study thus provides firm-level support for the notion that labor mobility stimulates overall innovation of a country or region.

IP Law & Policy

Top tens in 2013: patent, trademark, copyright and trade secret cases

Stephen M. McJohn (Suffolk University Law School)

Northwestern Journal of Technology and Intellectual Property, Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2366496

This paper discusses notable intellectual property law case law in the United States in 2013. The Supreme Court decided four patent cases, holding that isolated human DNA is not patentable; that lawsuits alleging legal malpractice in patent cases are to be litigated in state, not federal, court; that seeds grown from genetically modified patented seeds cannot be resold; and that reverse-payment settlements between brand name and generic pharmaceutical companies are subject to scrutiny under the anti-trust laws. The one trademark case the Court decided addressed an issue with more impact in the patent area: whether a rights holder can destroy jurisdiction in a declaratory judgment case, by promising not to sue.

First sale, or exhaustion, proved to be a pressure point. In all areas, courts looked at how much control a rights holder has on authorized products released to the market. The Supreme Court held that copyright is not infringed, where books printed overseas with the permission of the copyright holder (intended for foreign markets) are imported to the US. Other copyright cases addressed whether first sale authorized resale of digital works, whether a digital clipping service violated copyright, and whether an artist's adaptation of authorized photo prints qualified for fair use. In patent law, the Court considered the application of exhaustion to works in code. Looking to another form of control of information, an increasing split appears with respect to how the Computer Fraud and Abuse Act protects information in computer systems, especially where the information is protected less by security measures than by contracts, such as employment contracts or web site terms of use.

On cross-border issues, the Supreme Court held that, in effect, a copyright holder does not have the right to create separate foreign and domestic markets. In patent law, the Federal Circuit held that International Trade Commission procedures may not be used to exclude infringing products, where no real domestic production or patent licensing program exists to protect, as opposed to simply putting leverage for settlement of a dispute.

Patent law federalism

Paul R. Gugliuzza (Boston University School of Law)

Wisconsin Law Review, Vol. 2014 (Forthcoming)

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2355858

Most lawsuits arising under federal law can be filed in either state or federal court. Patent suits, however, may be filed only in federal court. Why do patent cases receive exceptional treatment? The usual answer is that federal courts, unlike state courts, provide uniformity and expertise in patent law. This Article analyzes whether exclusive jurisdiction actually serves those policy aims and concludes that the uniformity-expertise rationale is overstated. If exclusive federal patent jurisdiction is to be justified, attention must also be given to pragmatic considerations, such as the respective quality of state and federal trial courts, the courts' ability to manage complex civil litigation, and the preclusive effects of state court judgments. By reconstructing the theoretical framework for exclusive federal patent jurisdiction, the Article yields normative insights for institutional policy more broadly. Most importantly, it suggests that legislative repeals of exclusive jurisdiction — in any field of law — will be ineffective because litigants, even if given a choice, will prefer the federal courts over inexperienced and unfamiliar state courts.

Improving (software) patent quality through the administrative process

Arti K. Rai (Duke University School of Law)

Houston Law Review, Vol. 51, No. 2, 2013

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2360613

The available evidence indicates that patent quality, particularly in the area of software, needs improvement. This Article, to be published in a Symposium on intellectual property and information law in the administrative state, argues that even an agency as institutionally constrained as the U.S. Patent and Trademark Office (“PTO”) could implement a portfolio of pragmatic, cost-effective quality improvement strategies. The argument in favor of these strategies draws upon not only legal theory and doctrine but also new data from a PTO software examination unit with relatively strict practices. Strategies that resolve around Section 112 of the patent statute could usefully be deployed at the initial examination stage. Other strategies could be deployed within the powerful new post-issuance procedures available to the agency under the America Invents Act. Notably, although the strategies the Article discusses have the virtue of being neutral as to technology, they are likely to have a very significant practical impact in the area of software.

IP & Litigation

Valuation of patented product features

Greg M. Allenby (Ohio State University)

Jeffrey P. Brazell (The Modellers)

John R. Howell (Pennsylvania State University)

Peter E. Rossi (University of California, Los Angeles)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2359003

Ultimately, patents have value to the extent to which the product features enabled by the patents have economic value in the marketplace. That is, products which are enhanced by inclusion of patented features should generate incremental profits to the firm offering the enhanced product. Measures of incremental profits should be at the heart of damage estimates in patent litigation. Incremental profits can only be assessed by considering demand for products with patented features and contrasting that demand to demand for the same product without the patent feature. Profit calculations must be based on valid estimates of demand as well as assumptions about how competitive forces affect demand. This requires a set of equilibrium calculations in which profits are measured by considering the competitive response to introduction of the product with the enhanced feature. A special variety of survey analysis called conjoint analysis can be used to estimate demand. Recently, conjoint methods have been applied in the patent setting but the measures of value used are not based on equilibrium profits. The Willingness To Pay and Willingness To Buy methods used by conjoint practitioners do not measure the economic value of a patented product feature. We illustrate our method using the market for digital cameras and show that current methods can overstate the value of the patent.

IP & Licensing

Licensing acquired patents

Michael Risch (Villanova University School of Law)

George Mason Law Review, Forthcoming 2014

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2366064

Patents have always been licensed. Patents have always been acquired. Patents have even been acquired for the purpose of licensing new entrants. In short, there have always been secondary markets. But licensing acquired patents is a fairly recent business model. To be sure, there have been some historical exceptions but, for the most part, historical licensing and secondary markets primarily involved inventors (and their companies) and producers of products and services. While some of the same costs and benefits might apply to licensing of non-acquired patents by individuals or producing companies, examining the acquisition model improves analytical rigor.

This essay, presented at the “New Business Models and New Opportunities” panel of the Commercial Function of Patents in Today’s Innovation Economy conference, explores acquired patent licensing in two ways. First, it makes the case that the business model is new while presenting and gleaning knowledge from historic exceptions. Second, it suggests ways that acquired patent licensing can have a commercial benefit, even though it is the least socially beneficial type of licensing, and even if the licensed patents are likely to be invalid if tested in litigation.

Potential benefits are three-fold. Benefits are maximized with good faith negotiation and pricing that does not overvalue patents given their likely validity. Even so, some of the benefits might occur even if licensing fails and litigation ensues. First, the cost of finding relevant patents implies that patent owners are in a better position to communicate information than are producers. Second, patent licenses can provide operating freedom, especially as opposed to competitors who have not licensed. Third, patent licensing can improve the marketplace and incentivize earlier technology transfer--eventually even cutting out the acquiring intermediary if it is efficient to do so.

IP & Biotechnology

Incorporating a right to health perspective into the resolution of patent law disputes

Emmanuel Kolawole Oke (University College Cork)

Health and Human Rights (2013) Vol. 15, No. 2, pp. 97–109

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2366645

This article adopts the view that the courts in developing countries can play an important role in improving access to medicines in their countries if they incorporate a right to health perspective when adjudicating patent cases involving pharmaceutical products. The article argues that, since patent rights are not human rights, they should not be allowed to trump the right to health. The paper examines two notable cases decided by the courts in Kenya that illustrate the crucial role that incorporating a right to health perspective can play in improving access to medicines. Finally, the paper provides five reasons why courts in developing countries cannot afford to ignore the right to health when adjudicating cases involving patent rights on pharmaceutical products.

About the editor

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

Contact

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

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

www.crai.com/antitrust

www.crai.com/ip

CRA's Competition and Intellectual Property Practices provide clients with a unique combination of antitrust economics expertise and IP valuation, damages, transactions, and strategy experience.



The publications included herein were identified based upon a search of publicly available material related to intellectual property. Inclusion or exclusion of any publication should not be viewed as an endorsement or rejection of its content, authors, or affiliated institutions. The views expressed herein are the views and opinions of the authors and do not reflect or represent the views of Charles River Associates or any of the organizations with which the authors are affiliated. Any opinion expressed herein shall not amount to any form of guarantee that the authors or Charles River Associates has determined or predicted future events or circumstances, and no such reliance may be inferred or implied. The authors and Charles River Associates accept no duty of care or liability of any kind whatsoever to any party, and no responsibility for damages, if any, suffered by any party as a result of decisions made, or not made, or actions taken, or not taken, based on this paper. If you have questions or require further information regarding this issue of *IP Literature Watch*, please contact the contributor or editor at Charles River Associates. This material may be considered advertising. Detailed information about Charles River Associates, a registered trade name of CRA International, Inc., is available at www.crai.com.

Copyright 2013 Charles River Associates