



# 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

### **Rethinking antitrust in the presence of transaction costs: Coasian implications**

Dennis W. Carlton (University of Chicago – Booth School of Business; National Bureau of Economic Research)

Bryan Keating (Compass Lexecon)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2561783](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2561783)

This article analyzes the implication of transaction costs for antitrust analysis and explains why the usual antitrust analysis can be misleading as a guide to consumer or society welfare because it assumes that pricing is linear and uniform. The article shows how the relevant transaction costs can be altered by conduct subject to antitrust review, such as loyalty discounts or merger, and thereby influence the pricing mechanism used. When conduct alters the pricing mechanism, a correct antitrust analysis must account for the consequences of that pricing on improved efficiency. The paper summarizes the results of merger simulations using nonlinear pricing to further illustrate the potential errors from ignoring the use of nonlinear pricing. Finally, the paper discusses how coalition formation, viewed through the lens of cooperative game theory, can identify those situations that might give rise to the creation of market power. The paper then applies the analysis to several topics of current antitrust interest including exclusive dealing, the conduct of credit card companies, and the setting of fair reasonable and non-discriminatory (FRAND) royalty rates for standard essential patents.

## IP & Innovation

### **Innovation and SMES patent propensity in Korea**

Junghee Han (Chonnam National University)

Almas Heshmati (Sogang University; Jönköping International Business School)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2558389](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2558389)

This paper analyzes the patent propensity as an outcome of innovative activities of regional SMEs. To achieve the aims, we apply robust regression analysis to estimate the models to test 5 research hypotheses using 263 firm level data located at Gwangju region in Korea. Our empirical results show that

a firm's industry characteristics, such as machinery and automotive parts industry, is negatively related with propensity to patent innovation. Also, unlike expectations, the InnoBiz firms designated as innovative SMEs by the government are not performing differently than general firms. Only the CEO's academic credentials are positively related with propensity to patent. From the findings, we can conclude that patenting propensity is not directly related with a firm's characteristics but mainly to CEO's managerial strategy. Also, we cannot find evidence for policy effectiveness from public support given to InnoBiz firms as part of the state policy to nurture photonic industry to boost regional economic development. Given the lack of strong policy effects, a new industry policy should be considered to actively promote SMEs innovativeness.

### **Does patent licensing mean innovation?**

Robin Feldman (University of California Hastings College of the Law)

Mark A. Lemley (Stanford Law School)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2565292](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2565292)

A commonly offered justification for patent trolls or non-practicing entities (NPEs) is that they serve as a middleman facilitating innovation, bringing new technology from inventors to those who can implement it. We survey those involved in patent licensing to see how often patent licenses actually led to innovation or technology transfer. We find that very few patent licenses from assertion actually lead to new innovation; most are simply about paying for the freedom to keep doing what the licensee was already doing. Surprisingly, this is true not only of NPE licenses but even of licenses from product-producing companies and universities. Our results cast significant doubt on one common justification for patent rights.

## **IP & Licensing**

### **Standard-essential patents (SEPs) and 'fair, reasonable and non-discriminatory' (FRAND) licensing**

Rajendra Kumar Bera (Acadinnet Education Services India Pvt. Ltd.)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2557390](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557390)

FRAND-encumbered SEP owners find themselves in a complex situation because fetters are put on their limited period freedom to exclude others from making, using, selling or offering to sell, and importing the claimed invention in the country of grant. In this paper we discuss some of the issues involved in FRAND-encumbered SEP licensing and their possible solutions. In particular we suggest that SEPs be treated as a separate class of patents of national importance in patent acts for which specific rules are framed for dealing with injunctions; the creation of a SEP tribunal that would decide how best contemporary public interest would be served with minimal FRAND commitments; and government intervention in the form of "march-in" rights on behalf of all those in need of the SEP in question to prevent a potential or real economic crisis from arising due to a lack of sufficient number of licensees or acts of discriminate licensing by SEP owners, to keep the market competitive.

### **Ideas on patent pools as a new model of development**

Francesco Paola (Independent)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2557972](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557972)

The analysis departs from the interdependence between seemingly different sectors, and from the strong incremental evolution that characterizes, for example, Information and Communications Technology, mobile web sectors, but also pharmaceuticals and more.

The analysis, therefore, identifies the systems of cooperation between industrial property and, for example, Patent pools, as the best forms to better govern the changes in production systems with strong incremental evolution, and as a new model of development.

The appropriate forms of organization are then considered, as well as the most appropriate incentives for the participation of pools in order to reduce the forms of information asymmetry and allow opportunities and exchanges for participants in the pool.

### **Optimal licensing of uncertain patents in the shadow of litigation**

Rabah Amir (University of Arizona – Department of Economics)

David Encaoua (Université Paris – Panthéon Sorbonne)

Yassine Lefouili (University of Toulouse – Toulouse School of Economics)

*Games and Economic Behavior*, 88 (2014) 320–338

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2552137](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2552137)

This paper investigates the choice of a licensing mechanism by the holder of a patent whose validity is uncertain. We provide sufficient conditions of a general nature under which the licensor prefers to use a per-unit royalty contract. In particular we show that this is the case for the holders of weak patents if the strategic effect of an increase in a potential licensee's unit cost on the equilibrium industry profit is positive. The latter condition is shown to hold in a Cournot (resp. Bertrand) oligopoly with homogeneous (resp. differentiated) products under general assumptions on the demands faced by firms. As a byproduct of our analysis, we contribute to the literature on the cost paradox in oligopoly by offering some new insights of independent interest regarding the effects of cost variations on Cournot and Bertrand equilibria.

## **IP & Litigation**

### **The Actavis inference: theory and practice**

Aaron S. Edlin (University of California at Berkeley; National Bureau of Economic Research)

C. Scott Hemphill (Columbia University Law School)

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

Carl Shapiro (University of California at Berkeley – Haas School of Business)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2560107](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2560107)

In *FTC v. Actavis, Inc.*, the Supreme Court considered "reverse payment" settlements of patent infringement litigation. In such a settlement, a patentee pays the alleged infringer to settle, and the alleged infringer agrees not to enter the market for a period of time. The Court held that a reverse payment settlement violates antitrust law if the patentee is paying to avoid competition. The core insight of *Actavis* is the Actavis Inference: a large and otherwise unexplained payment, combined with delayed entry, supports a reasonable inference of harm to consumers from lessened competition.

This paper is an effort to assist courts and counsel in implementing the Actavis Inference. First, we evaluate a variety of fact patterns that have arisen in the district courts since *Actavis*, including payment that takes a form other than cash. For example, a branded drug maker may promise not to offer an authorized generic drug. As we explain, under *Actavis*, such agreements are especially likely to violate antitrust law. We also consider how much detail a plaintiff must offer in its initial complaint to comply with federal pleading requirements.

Second, we demonstrate that the Actavis Inference fully applies when multiple generic firms, rather than just one, threaten to enter the market. Our economic model shows that the Actavis Inference becomes stronger and more important in the presence of multiple generic firms. Our analysis demonstrates that the contrary conclusions reached in a recent paper by Bruce Kobayashi, Joshua Wright, Douglas

Ginsburg, and Joanna Tsai (KWGT) are incorrect, inconsistent with KWGT's own analysis, or irrelevant to a faithful implementation of Actavis.

Third, we clarify the reasons not to litigate the patent in the antitrust case. Thanks to the Actavis Inference, a trial court need not determine patent validity or infringement in order to assess the legality of the settlement. The antitrust question depends upon the ex-ante prospects in patent litigation and not ex post litigation of the patent by a patent court or by the antitrust court considering the settlement. Litigating the patent is thus of limited probative value and not dispositive regarding a potential antitrust violation.

### **Why do inventors sell to patent trolls? Experimental evidence for the asymmetry hypothesis**

Stephen Haber (Stanford University – Hoover Institution and Political Science)

Seth H. Werfel (Stanford University)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2552734](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2552734)

Why do individual patent holders assign their patents to "trolls" rather than license their technologies directly to manufacturers or assert them through litigation? We explore the hypothesis that an asymmetry in financial resources between individual patent holders and manufacturers prevents individuals from making a credible threat to litigate against infringement. First, individuals may not be able to cover the upfront costs associated with litigation. Second, unsuccessful litigation can result in legal fees so large as to bankrupt the individual. Therefore, a primary reason why individual patent holders sell to PAEs is that they offer insurance and liquidity. We test this hypothesis by experimentally manipulating these financial constraints on a representative sample of inventors and entrepreneurs affiliated with academic institutions that are particularly known for their innovative activity: Stanford University and the University of California, Berkeley. We find that in the absence of these constraints, subjects were significantly less likely to sell their patent to a PAE in a hypothetical scenario. Furthermore, treatment effects were significant only for subjects who were hypothesized to be most sensitive to these constraints.

## **IP Law & Policy**

### **Bad actors and the evolution of patent law**

Brian J. Love (Santa Clara University School of Law)

*Virginia Law Review Online, Vol. 1011, p.1, 2015*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2558223](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2558223)

Historically high levels of abusive patent enforcement fuel an ongoing debate on the need for legislative and judicial reforms designed to deter bad faith conduct by patent holders. To date, this debate has focused intently on the direct monetary costs and benefits of reform, most notably the impact on litigation costs and patent valuations. This Essay argues that this focus has led patent reformers and their opponents to overlook a significant indirect benefit of taking action against bad actors: namely, that strengthening courts' ability to punish and prevent bad behavior will tend to make patent law more coherent and predictable in the long run. As the Essay explains, patent law's lack of effective deterrents to bad faith conduct likely played a role to the creation of some of the most perennially confounding aspects of patent law. In the words of a familiar adage, patent law has seen its fair share of "bad facts" spawning "bad law." In light of this history, there is good reason to believe that one benefit of raising the bar for acceptable conduct in patent litigation is that patent law will thereafter develop more logically for the simple reason that courts will be forced to grapple with bad facts (and thus tempted to make bad law) less often as a result.

## **TRIPS, patents, and innovation: a necessary reappraisal**

Bryan Christopher Mercurio (Chinese University of Hong Kong – Faculty of Law; University of New South Wales – Faculty of Law)

*E15 Expert Group on Trade and Innovation: Think Piece, 2015*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2562736](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2562736)

This think piece examines the issue of patents and innovation in the light of both the TRIPS Agreement and the available evidence. After reviewing the *raison d'être* of the TRIPS Agreement, it focuses on what can be done within the confines of the WTO to ensure that patent protection stimulates innovation, and that the benefits are in balance with social costs. Towards this, it explores four alternatives to the status quo that would place innovation at the core of the TRIPS Agreement. The think piece concludes with recommendations that should be part of a long-term vision to promote innovation, but emphasizes that the discussion and research for this should begin today.

## **The globalization of intellectual property rights**

Andrea Filippetti (Italian National Research Council; University of London – Birkbeck College)

Daniele Archibugi (Italian National Research Council; University of London – School of Business, Economics and Informatics)

*The Global Handbook of Science, Technology and Innovation, Wiley Oxford, 2015, Forthcoming*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2557333](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557333)

There is a heated debate – in academia and in policy circles – about the usefulness of a stronger global regime of intellectual property rights (IPRs). Supporters of strong IPRs argue that they will increase investments in R&D and innovation and disseminating it across countries. Detractors respond that this would imply another burden on developing countries, making slower and more difficult their catching up. The introduction of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in 1994 has even further polarized these positions. We argue that the relevance of IPRs in facilitating or obstructing technology transfer has largely been exaggerated. Innovation-based development is neither hampered nor facilitated by strong or weak IPRs, but rather by the willingness to invest resources in R&D, education, and infrastructures. While TRIPS have effectively represented an attempt to generate a global regime of IPRs, its economic effectiveness has been rather limited since enforcement and policing of IPRs infractions are still firmly in the hands of national authorities.

## **Copyright Law**

### **Patenting physibles: a fresh perspective for claiming 3D-printable products**

Daniel Harries Brean (The Webb Law Firm)

*Santa Clara Law Review, 2015, Forthcoming*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2560816](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2560816)

To successfully combat patent infringement, it is necessary to have an effective way to extinguish infringement at the source. In the case of 3D printing, this means being able to enforce one's patent against those who are selling or distributing the printable CAD files. But the law does not currently provide patent protection for CAD files. Because this severely limits the enforceability of patents in the emerging 3D printing space, it discourages innovation and needs to be remedied.

Beauregard claims are perhaps the best existing option for patents that might encompass CAD files, but Beauregard claims are still largely ineffective because they are tied to a physical storage medium. A better approach is to push for a new Beauregard-like claiming style that permits patenting CAD files *per se*. Such claims can overcome likely abstractness or printed matter challenges to patentability. If this claiming practice is implemented, it will stop putting digitally-designed and sold products at an unfair disadvantage to other types of product inventions.

## **The eureka myth: creators, innovators, and everyday intellectual property**

Jessica M. Silbey (Suffolk University Law School)

*The Eureka Myth: Creators, Innovators, and Everyday Intellectual Property* (Stanford University Press, 2015)

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2564768](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2564768)

In 1789, the Constitution enshrined protections for authors and inventors. Yet we still debate the merits of intellectual property laws and whether they work as intended. What facilitates innovation and creativity in our digital age? What role does IP play in promoting innovation and creativity in the United States? Silbey cuts through the current debates and goes straight to the source: the artists and innovators themselves. By centering on accounts of creative and innovative work provided by artists, scientists, their employers, managers, and lawyers, *The Eureka Myth* breaks new ground. In doing so, it draws out new and surprising conclusions about the sometimes misinterpreted relationships between creativity, innovation, and IP.

## **IP & Asia**

### **The institutional fragmentation of international intellectual property law in Pacific Rim: authority and legitimacy, regime interaction, and future institutional development in a 'world society'**

Anlei Zuo (University of Hong Kong)

*TDM*, Vol. 12, Issue 1 (2015)

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2511669](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2511669)

Under the context of institutional fragmentation of international IP law in this world society, the international IP law in Pacific Rim is in a flux with various international IP legal actors, including TRIPS, WIPO, CBD, TPP, RECP, FTAAP, etc. With the method of socio-legal analysis emphasizing and basing itself on authority and legitimacy, interaction of IP regimes and future institutional development, this paper investigates the historical evolution of international IP regimes in Pacific Rim and their interactions, paying particular attention to the analysis of two concepts (authority and legitimacy) onto those international IP regimes and their competitive gaming. The present literatures have shed light on some inter-institutional interactions and forum competitions in some subfields of international law (like International Law of the Sea, International Environmental Protection, International Fishery Regulation) as well as some international IP regimes and normative rules specifically, with some descriptive, analytical and interpretative insights unfolded, notwithstanding the lack of deep-going studies focusing on the evolutionary changes and regime competition contextualized from a systematic and structural perspective. After the examination of the current configuration of international IP legal regimes in the Pacific Rim, the core research questions hereinto consist of: how this “institutional fragmentation” would affect the authority and legitimacy of international IP legal regimes and subsequently the international law-making process in international IP law; and what kinds of further implications for future institutional development of international IP law can be deduced. Then predictable trends on the institutional developments and its fragmentation of Pacific Rim’s international IP law, mainly driven forward by China and US, could be deduced.

## Other IP Topics

### Individual versus institutional ownership of university-discovered inventions

Dirk Czarnitzki (KU Leuven – Department of Managerial Economics, Strategy, and Innovation)

Thorsten Doherr (Centre for European Economic Research)

Katrin Hussinger (Universite du Luxembourg; Catholic University of Leuven; Centre for European Economic Research)

Paula Schliessler (Centre for European Economic Research)

Andrew A. Toole (US Department of Agriculture)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2557334](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557334)

We examine how the ownership of intellectual property rights influences patenting of university-discovered inventions. In 2002, Germany transferred patent rights from faculty members to their universities. To identify the effect on the volume of patenting, we exploit the researcher-level exogeneity of the 2002 policy change using a novel researcher-level panel database that includes a control group not affected by the law change. For professors who had existing industry connections, the policy decreased patenting, but for those without prior industry connections, it increased patenting. Overall, fewer university inventions were patented following the shift from inventor to institutional ownership.

### Financing innovation: legal development of intellectual property as security in financing, 1845–2014

Xuan-Thao Nguyen (Indiana University Robert H. McKinney School of Law, Center for Intellectual Property & Innovation)

*Indiana Law Review*, Vol. 48, p. 509, 2015

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2557633](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2557633)

There is a need for both traditional and online lenders to appreciate the intellectual property assets held by small businesses. The intellectual property assets should be included in the analytics in assessing the overall health of a business seeking a loan or a line of credit for its new innovative product, idea, or vision. The Article ends with a brief conclusion that in order to maintain the United States' innovative edge, attention to the access to financing by small businesses must be at the center of the discussion, and intellectual property must be recognized as part of that center.

### 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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