



IP Literature Watch

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January 2015

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

On the inefficiencies of efficiency as the single-minded goal of antitrust

Albert Foer (American Antitrust Institute)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2547681

Prepared as background for the AAI's June 18-19 conferences on efficiency, this paper provides an overview of issues relating to the role of efficiency in antitrust, considering the various types of efficiency (allocative, productive, and dynamic) and the conflict of priorities that may exist among these three types; the breadth of economics and economists, and a comparison of the Chicago School version of economics with what is commonly taught in business schools; the role of efficiency in today's antitrust analysis; and a discussion of what is excluded from today's analysis, with an emphasis on non-efficiency economic values, including a discussion of externalities and inefficiencies such as X-inefficiency, diseconomies of scale, scope, and coordination, and the too-big-to-fail problem. The paper considers problems of prediction and quantification in the context of possible reforms and concludes that the pendulum has swung too far in favor of efficiency, but that reforms encompassing a broader view present their own difficulties, leading to the suggestion that if efficiency is to retain a formal role in analysis, then there should be both more development of the concept of what is a cognizable efficiency and also development of the concept of cognizable inefficiency, which in situations involving high levels of concentration, should be netted out against efficiencies.

Inconvenient truths on merger retrospective studies

Gregory J. Werden (US Department of Justice – Antitrust Division)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2545343

Inconvenient truths prevent merger retrospective studies from substantially altering our understanding of competitive effects from horizontal mergers. Merger retrospectives cannot definitively determine the effects of particular mergers, and if they could, merger retrospectives still could not provide evidence

supporting merger assessments grounded in data on actual merger effects rather than in economic theory and legal presumptions. If merger retrospectives are to have some prospect of recalibrating merger enforcement, they must be transformed from econometric exercises into case studies examining the details of the relevant agency's assessment, but inconvenient truths likely prevent much from being learned through even such studies.

An optimal and just financial penalties system for infringements of competition law: a comparative analysis

Ioannis Lianos (University College London – Faculty of Laws)

Frederic Jenny (ESSEC Business School)

Florian Wagner-von Papp (University College London – Faculty of Laws)

Evgenia Motchenkova (VU University Amsterdam – Department of Economics)

Eric David (Vaughan Avocats)

CLES Research Paper No. 3/2014

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2542991

The report examines optimal financial penalties from an economic and a comparative perspective. While emphasis is put on deterrence, we also examine some limits to the optimal enforcement theory employed by economists to design effective sanctions, in particular the principle of proportionality and the need for the penalty to be related to the harm caused and the wrong committed, the legal system integrating corrective justice concerns. The report delves into the tension between over-enforcement and under-enforcement and that between a more effects-based approach for setting financial penalties (sanctions) that would rely on economic methodologies and a case-by-case analysis to provide an accurate estimate of the harm caused by the anticompetitive conduct and a more "forms-based" approach that would rely on the use of proxies of percentages of the volume of commerce or the affected sales. The latter reduce the administrative costs of the authorities in designing appropriate sanctions but are less accurate than effects-based approaches. The report examines intermediary approaches put forward by the literature and their possible application to various competition law infringements (e.g. cartels, abuse of a dominant position). The final part of the report proceeds to a detailed comparative analysis of the financial penalties (sanctions) regimes for infringements of competition Law in the European Union, United States, Germany, United Kingdom, France and Chile, taking an empirical and a doctrinal perspective. Specific recommendations for the reform of the financial penalties system in Chile are also provided.

IP & Standardization

Competition law as the limit to standard-setting

Bjorn Lundqvist (Copenhagen Business School, Stockholm University - Faculty of Law)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2551026

The aim of this paper is to provide an analysis of the application of EU competition law to standard-setting, by looking at case law under both Articles 101 and 102 TFEU. I will try to show that there is, and should be, a difference in competition law treatment of standards and standard-setting conduct depending on whether the market exposed to the standard is plagued with network effects or not. For markets with network effects, collaboration to create standards is benign, even pro-competitive, while access to such standards, if covered by intellectual property rights, may, in exceptional circumstances, be granted by the antitrust agencies. On the other hand, agreements to decide standards for markets

which do not display network effects should benefit from a heightened antitrust scrutiny, because these standard agreements may cause exclusionary anticompetitive effects.

'The rise of standardization and the limits of self-governance' – unilateral conduct under international standards from EU competition law perspective

Bjorn Lundqvist (Copenhagen Business School, Stockholm University - Faculty of Law)

Thomas Riis and Jens Schovsbo (ed), *'User Generated Law – Reconstructing IP law in the knowledge society,'* Edward Elgar, 2015

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2551060

The “patent war” between the largest software, computer and telecom firms is still raging in courtrooms all over the world. The value at stake in these cases is difficult to calculate, but range in the billions, and on a principle level they deal with the fundamental issues of property, ownership and access to the global virtual infrastructures of the future. This paper provides an analysis of part of the “patent war” and more specific the question of access to international standards and the essential patents under these global standards on fair or fair reasonable and non-discriminatory (FRAND) terms. Without access to these patents on fair or FRAND terms firms cannot compete, and the contentious issue is not whether refusal to license these patents may amount to an antitrust violation, but on what terms such access should be granted. How should FRAND be interpreted? The aim for this text is to analyse this question in light of the recent case law development regarding what is an abuse in reference to the terms for accessing standard essential patents (SEPs).

IP & Innovation

The fracking revolution: shale gas as a case study in innovation policy

John M. Golden (University of Texas at Austin – School of Law)

Hannah Jacobs Wiseman (Florida State University – College of Law)

Emory Law Journal, Vol. 64, No. 3, 2015, *Forthcoming*

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2548080

The early twenty-first century has witnessed a boom in oil and natural gas production that promises to turn the United States into a new form of petrostate. This boom raises various questions that scholars have begun to explore, including questions of risk governance, federalism, and export policy. Relatively neglected, however, have been questions of why the technological revolution behind the boom occurred and what this revolution teaches about innovation theory and policy. The boom in U.S. shale gas production reflected long-gestating infrastructure developments, a convergence of technological advances, government-sponsored research and development, the presence or absence of intellectual property rights, rights in tangible assets such as land and minerals, and tax and regulatory relief. Consequently, the story behind the boom reaches far beyond the risk-taking and persistence of George Mitchell, whose independent production company achieved pioneering success with hydraulic fracturing (“fracking”) in Texas’ Barnett Shale. Indeed, the broader story demonstrates how a blend of distinct policy levers, reasonably adjusted over time, can combine to foster a diverse innovation ecosystem that provides a robust platform for game-changing innovation. As exemplified by this story, the centrality of other policy levers can mean that patents play only a modest role even in spurring technological development by profit-driven private players. Finally, the Article demonstrates how such lessons can helpfully inform efforts either to extend the United States’ “fracking revolution” abroad or to develop other potentially revolutionary technologies such as those associated with renewable energy. Lessons drawn

from this case study include “negative lessons” about the possibility and even likelihood of downsides of a technological boom or the policies used to promote it — for example, environmental damage that more careful regulation of a developing technology such as fracking might have avoided. Anticipatory and continuing attention to such potential downsides can help prevent innovation-promoting policies from becoming “sticky” in a way that undercuts innovation’s promise and popular appeal.

Intellectual property rights hinder sequential innovation – experimental evidence

Julia Brüggemann (University of Göttingen)

Paolo Crosetto (Grenoble Applied Economics Laboratory)

Lukas Meub (University of Göttingen)

Kilian Bizer (University of Göttingen)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2545950

In this paper we contribute to the discussion on whether intellectual property rights foster or hinder innovation by means of a laboratory experiment. We introduce a novel Scrabble-like creativity task that captures most essentialities of a sequential innovation process. We use this task to investigate the effects of intellectual property allowing subjects to assign license fees to their innovations. We find intellectual property to have an adversely effect on welfare as innovations become less frequent and less sophisticated. Communication among innovators is not able to prevent this detrimental effect. Introducing intellectual property results in more basic innovations and subjects fail to exploit the most valuable sequential innovation paths. Subjects act more self-reliant and non-optimally in order to avoid paying license fees. Our results suggest that granting intellectual property rights hinders innovations, especially for sectors characterized by a strong sequentiality in innovation processes.

IP & Litigation

Top tens in 2014: 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=2549855

The Supreme Court decided more patent cases in 2014 than any previous year. It lowered the standard for awarding fees in patent cases, clarified that the patent holder carries the burden of showing infringement even in declaratory judgment actions, lowered the standard for invalidating patent claims as vague, and rejected the theory that infringement may occur by simply adding the actions of separate parties. The most important case, *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, announced a test for patentable subject matter, especially for software and business method inventions, that was considerably more restrictive than case law to date.

Meanwhile, the most notable case in copyright seemed to go in the opposite direction, raising the level of copyright protection for software, perhaps even creating a split in the circuits. In *Oracle Am., Inc. v. Google Inc.*, the Federal Circuit held that the application programming interfaces of the Java programming language were copyrightable expression, as opposed to non-copyrightable functional matter. The Supreme Court held that rebroadcast of television programs infringed the public performance right, even where done using technology that effectively gave each viewer a personal antenna. The Court also rejected the application of laches in copyright cases, permitting litigation of long-standing infringement.

Other cases provided important precedent on evergreen issues in intellectual property law. *Cambridge Univ. Press v. Patton* reversed a safe harbor approach to the application of fair use to university coursebooks. *Garcia v. Google, Inc.* raised the possibility that anyone who contributes to a work, such as an actor in a film, may have their own separate copyright. Trademark cases addressed such questions as who may bring a false advertising case, when matter is functional, when trademarks become generic or are otherwise abandoned, when others may use a mark to describe things, and when a mark may be cancelled as disparaging of a group of people. In trade secret, the Third Circuit avoided the surprisingly important issue of liability for account slurping. Other cases dealt with the interfaces between trade secret and contract and between trade secret and patent. Courts also dealt with the balance between disclosing information to potential partners and maintaining sufficient security measures to qualify for trade secret protection.

IP Law & Policy

Litigation in the middle: the context of patent-infringement injunctions

John M. Golden (University of Texas at Austin – School of Law)

Texas Law Review, Vol. 92, No. 7, 2014

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2545424

A large fraction of patent-infringement injunctions issued by district courts in 2010 have a surprisingly low-tech feel, involving subject matter that might be viewed as more typical of a past “Industrial Age” than the modern “Information Age.” The predominance of relative mundanities among the targets of permanent injunctions challenges the conventional sense that patent litigation is characteristically a high-stakes “sport of kings.” The general absence of software from technologies subjected to injunctions suggests that further fiddling with the law on injunctions could do little to address continuing concerns about the patent system’s treatment of software. Further, evidence that patent litigation is often a more bourgeois than regal affair could indicate that a sometimes overlooked “Mittelstand” of small and medium-sized patent holders plays an important part in the patent system’s operation and social effect. The apparent existence of a substantial tier of “middling” litigation suggests that, in designing patent law and policy, decision-makers should think about more than the forms of litigation that typically garner headlines.

Sovereign trusteeship and multilateral protection of intellectual property rights

Rajam N. (Independent)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2544449

TRIPS established a minimum standard of intellectual property rights to be adopted by the member states along with an obligation that mandates mutual recognition of domestic laws which offer the minimum standards of protection. The evolution of this regime has led to concerns over sovereign discretion in matters of domestic importance such as health, food security and education. In the current framework of IP legal pluralism, States must possess an active regulatory discretion, particularly in ensuring that exclusive monopoly rights are not pursued at the cost of its citizens in matters relating to essential needs of their life. In doing so, States must also give due respect to the concerns of global welfare.

Intellectual property rights and access to innovation: evidence from TRIPS

Margaret Kyle (University of Toulouse – Toulouse School of Economics)

Yi Qian (Northwestern University – Kellogg School of Management)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2543650

We examine the effect of pharmaceutical patent protection on the speed of drug launch, price, and quantity in 60 countries from 2000-2013. The World Trade Organization required its member countries to implement a minimum level of patent protection within a specified time period as part of the TRIPS Agreement. However, members retained the right to impose price controls and to issue compulsory licenses under certain conditions. These countervailing policies were intended to reduce the potential static losses that result from reduced competition during the patent term. We take advantage of the fact that at the product level, selection into TRIPS "treatment" is exogenously determined by compliance deadlines that vary across countries. We find that patents have important consequences for access to new drugs: in the absence of a patent, launch is unlikely. That is, even when no patent barrier exists, generic entry may not occur. Conditional on launch, patented drugs have higher prices but higher sales as well. The price premium associated with patents is smaller in poorer countries. Price discrimination across countries has increased for drugs patented post-TRIPS and prices are negatively related to the burden of disease, suggesting that countervailing policies to offset expected price increases may have had the intended effects.

Copyright Law

The multiplicity of copyright laws on the internet

Marketa Trimble (University of Nevada, Las Vegas, William S. Boyd School of Law)

Fordham Intellectual Property, Media & Entertainment Law Journal, Forthcoming

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2549101

From the early days of the Internet, commentators have warned that it would be impossible for those who act on the Internet ("Internet actors") to comply with the copyright laws of all Internet-connected countries if the national copyright laws of all those countries were to apply simultaneously to Internet activity. A multiplicity of applicable copyright laws seems plausible at least when the Internet activity is ubiquitous — i.e., unrestricted by geoblocking or by other means — given the territoriality principle that governs international copyright law and the choice-of-law rules that countries typically use for copyright infringements.

This Article posits that the multiplicity of applicable national copyright laws on the Internet is not as significant a problem for law-abiding Internet actors as some commentators fear. What makes the multiplicity workable for Internet actors are the realities — or inefficiencies — of cross-border copyright enforcement that de facto limit the number of potentially applicable national copyright laws. This Article reviews the solutions that have been proposed to address the multiplicity problem and examines the objections to the proposals that have already been or could be raised. The Article then analyzes the current realities of copyright enforcement on the Internet and contrasts the realities with the anticipated workings of the proposed solutions.

The dual narratives in the landscape of music copyrights

Lydia Pallas Loren (Lewis & Clark Law School)

Houston Law Review, Vol. 52, No. 2, 2014

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2551342

The challenges that new technologies bring is a constant theme in copyright law, but in the field of music the problems are particularly pronounced. Much has changed in the music industry over the past century. As new business models emerged, incumbents in the music industry fought vigorously to capture revenue streams. As a result, the fragmented copyright rights that characterize the music industry have taken on new layers of complexity. The Copyright Act, federal regulations promulgated by the Copyright Office, Copyright Royalty Board proceedings, antitrust consent decrees, and federal district courts acting as “rate courts,” all play roles in establishing who has to pay, who gets paid, and how much money changes hands in the music industry. The variety of regulatory mechanisms that shape the royalty rates paid by different businesses that use and distribute music has resulted in a stunning disparity in prices paid for the music inputs used by different businesses.

This Article explores the complexity of music licensing through the lens of dual competing narratives in music copyright. The first narrative explains the varying treatment of music businesses as being aimed at maintaining fair remuneration for copyright owners in light of changing technologies. The second narrative sees the varying treatment as being aimed at protecting incumbent entities from the competition brought about through changing business models made possible by technological advances. Although the venues in which these narratives play out vary throughout different segments of the music industry, both narratives are clearly at play in shaping the complexity of music copyright.

A macabre fixation: is plastination copyrightable?

Kirill Ershov (State Bar of California)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2544744

Dr. Gunther von Hagens invented plastination as a process to preserve anatomical specimens. Plastination replaces water and fats in anatomical tissues with plastic polymers, allowing for indefinite preservation, ease of handling, and storage of the plastinated “objects.” Beginning in the 1990s, von Hagens developed Body Worlds, a lucrative traveling exhibition composed mostly of plastinated cadavers in various degrees of dissection and often-provocative poses. Immensely successful and controversial, Body Worlds has been continuously touring the world in multiple installments. Various competing shows have sprung up, with von Hagens’s biggest competitor, Premier Inc., also becoming a successful player in the worldwide plastinated cadaver market.

In 2005, von Hagens filed a federal lawsuit against Premier. Von Hagens claimed that his cadavers are unique in their manner of dissection and positioning and are entitled to copyright protection as original expressions of ideas fixed in tangible media, and that Premier infringed on those expressions with its own Bodies Revealed exhibition. The suit was eventually settled out of court.

This paper examines whether there is original expression in the type of plastinated exhibits presented by von Hagens, exploring in detail whether there is protected expression in the manner of dissection and the positioning of plastinated bodies. Von Hagens’s work is put to an originality analysis in the first section of the paper. Von Hagens’s exhibits, as well as those of his competitors, are examined to see if a copyright infringement claim can be sustained against appropriation in competing exhibits. Doctrines of merger and

scenes a faire play a recurring role in this analysis, as both the medium and the subject matter restrict the scope of protected original expression in these exhibits. These doctrines require a stricter, thin copyright standard of comparison to determine substantial similarity as applied to most of the aspects of plastinated exhibits. This paper concludes that an appropriately stricter, thin copyright standard makes a copyright infringement claim more difficult, but does not rule it out.

A plastinated cadaver falls under the protection of the Copyright Act as a three dimensional work composed of plastic that can be considered to be created for scientific or educational use. The originality requirement dictated by the Supreme Court in *Feist Publications, Inc. v. Rural Telephone Service Co.* is minimal — only a “modicum of creativity” is required for a work to be protected by a copyright — however, not all aspects of a work may be considered when determining originality, ideas, methods, facts, and scenes a faire are not protected.

IP & Asia

How India can attract more foreign direct investment, create jobs, and increase GDP: the benefits of respecting the intellectual property rights of foreign pharmaceutical producers

Robert J. Shapiro (Georgetown University – Robert Emmett McDonough School of Business)

Aparna Mathur (American Enterprise Institute)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2540591

This study examines the economic impact of India’s current approach to intellectual property (IP) rights, as it affects pharmaceutical products and foreign direct investment (FDI). We review the literature on the economic effects of FDI and found that across most developing nations, FDI has strong, positive effects on a country’s growth, productivity and incomes. Next, we focus on the impact of IP rights and enforcement and pharmaceutical firms. Using the Ginarte-Park (G-P) index of nations with regard to IP rights and enforcement, we found a strong relationship between how much FDI a nation attracts and the strength of its IP regime, and an even stronger relationship for pharmaceutical FDI. Next, we analyzed the history of improvements in IP rights in India and found that flows of pharmaceutical FDI to India were highly responsive to those improvements and to setbacks in those improvements. Next, we estimated the impact of improvements in IP rights and enforcement in India. We found that if India adopted an IP regime comparable to China, annual FDI flows in pharmaceuticals to India could increase by as much as 33 percent; and if it adopted a system of IP rights and enforcement comparable to the United States, those FDI flows could rise by as much as an estimated 83 percent per-year.

We also examine the links between these FDI flows and the R&D activities in foreign markets of those foreign direct investors. We find that under a system of IP rights comparable to China, innovative pharmaceutical R&D in India would double from 2014 to 2020, rising from \$645 million to \$1.3 billion. Under an IP regime comparable to the United States, such R&D would grow nearly six times, from \$760 million in 2014 to \$4.2 billion in 2020. Further, with greater pharmaceutical FDI and R&D, the Indian people’s access to the latest pharmaceutical treatments should increase. We found that if India adopts an IP regime comparable to China, its access to new innovative drugs should increase by about 5 percent; and this increased access to new pharmaceutical treatments could raise the average life expectancy of working-age Indians by four weeks. We estimate the long-term economic benefits of a four week increase in life expectancy at roughly \$32 billion. Similarly, if India adopted an IP regime comparable to the United States, the increased access to new pharmaceuticals would extend the average life

expectancy of working-age Indians by an estimated 10 weeks, with long-term benefits totaling some \$80 billion. Finally, we found that greater access to new pharmaceuticals could lower costs for other forms of medical treatment, lower government subsidies for medical care, and lower income losses from illnesses. We find that those savings could range from \$5.2 billion per-year to \$19.2 billion per-year.

Other IP Topics

Are patent fees effective at weeding out low-quality patents?

Gaétan De Rassenfosse (Ecole Polytechnique Fédérale de Lausanne)

Adam B. Jaffe (Motu Economic and Public Policy Research)

Working Paper

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2545714

The paper investigates whether patent fees are an effective mechanism to deter the filing of low-quality patent applications. The study analyzes the effect of the Patent Law Amendment Act of 1982, which resulted in a substantial increase in patenting fees at the U.S. Patent and Trademark Office, on patent quality. Results from a series of difference-in-differences regressions suggest that the increase in fees led to a weeding out of low-quality patents. About 16-17 per cent of patents in the lowest quality decile were filtered out. The figure reaches 24-30 per cent for patents in the lowest quality quintile. However, the fee elasticity of quality decreased with the size of the patent portfolio held by applicants. The study has strong policy implications in the current context of concerns about declines in patent quality and the financial vulnerability of patent offices.

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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