



# 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

### **Missing the forest for the trolls**

Mark A. Lemley and A. Douglas Melamed

*Columbia Law Review, Forthcoming*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2269087](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2269087)

Trolls are a significant feature of the patent system. They account for a large number of suits, now a majority of all patent assertions in the country and an even higher percentage in the information technology (IT) industries. They win both larger judgments and larger settlements than do “practicing entities” (“PEs”) -- those that practice patents and are not principally in the business of collecting money from others that practice them. And they do so despite complaints that trolls assert weak patents and some evidence that troll patents are more likely to lose in court.

Nonetheless, we think the focus on patent trolls obscures a more complex set of challenges confronting the patent system. In this paper, we make three points. First, patent trolls are not a unitary phenomenon. We see at least three different troll business models developing, and those models have different effects on the patent system. Second, patent assertions by practicing entities can create just as many problems as assertions by patent trolls. The nature of many industries obscures some of the costs of those assertions, but that does not mean they are cost-free. In addition, practicing entities are increasingly engaging in “patent privateering,” in which product-producing companies take on many of the attributes of trolls. Put differently, while trolls exploit problems with the patent system, they are not the only ones that do so. Third, many of the problems associated with trolls are in fact problems that stem from the disaggregation of complementary patents into too many different hands. That in turn suggests that groups like Intellectual Ventures might be reducing, not worsening, these problems (though, as we will see, the overall effects are ambiguous), while “patent privateers” that spin off patents in order for others to assert them might make things worse. For this reason, patent reformers and antitrust authorities should worry less about aggregation of patent rights and more about disaggregation of those rights, sometimes accomplished by spinning them out to others.

Understanding the economics of patent assertions by both trolls and practicing entities allows us to move beyond labels and the search for “bad actors,” focusing instead on aspects of the patent system itself that give rise to the problems and on specific, objectionable conduct in which both trolls and practicing entities sometimes engage. Patent trolls alone are not the problem; they are a symptom of larger problems with the patent system. Treating the symptom will not solve the problems. In a very real sense, critics have been missing the forest for the trolls. Exposing the larger problems allows us to contemplate changes in patent law that will actually tackle the underlying pathologies of the patent system and the abusive conduct they enable.

### **Facilitating negotiation for licensing standard essential patents in the shadow of injunctive relief possibilities**

Haksoo Ko

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2267280](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2267280)

Apple and Samsung, two of the world’s premier technology companies, have recently been involved in heated legal disputes over certain patents and related technologies. Lawsuits were filed in many jurisdictions around the world. In Korea, Samsung filed a lawsuit against Apple, and one of the issues raised was whether an injunctive relief can be granted when a holder of standard essential patents committed to license its patents under FRAND (fair, reasonable, and non-discriminatory) terms. The answer to this question will have significant ramifications, beyond determining the result of the ongoing lawsuit, and will have a serious impact on the processes and applicable rules employed at many standard-setting organizations.

This article reviews the court decision in Korea, with a particular focus on the justifiability of granting an injunction to a holder of standard essential patents who committed to grant licenses under FRAND terms. In reviewing the court decision, the article will consider the negotiating parties’ bargaining behavior and related transaction costs, when an injunctive court relief is sought by a party. This article then proposes a new court procedure, which would ameliorate the parties’ incentives to engage in hold-up or reverse hold-up and would instead prompt and facilitate the parties’ negotiation. Under the proposed court procedure, the court would initially make an interim and provisional decision on FRAND and would make a final and definitive decision on FRAND only at a later stage when doing so becomes necessary. This procedure would exert pressures on the parties to engage in negotiation in earnest and in good faith, without necessarily relying on the court’s direct involvement.

### **The need for a patent-centric standard of antitrust review to evaluate reverse payment settlements**

Tania Khatibifar

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2266525](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2266525)

Reverse payment settlements have ignited a firestorm debate among all affected parties: consumer groups, brand-name pharmaceutical companies, generic manufacturers, pharmaceutical wholesalers and retailers, lawmakers, executive agencies, and the federal courts. The Federal Trade Commission (“FTC”) has waged a decade-long battle against such private settlements of pharmaceutical patent litigation as illegal market-sharing agreements, with skirmishes among the circuits trending in favor of the settling

parties until recently. The Third Circuit's recent decision in *In re K-Dur Antitrust Litigation* unsettled this trend, and the Supreme Court granted the FTC's petition for a writ of certiorari in a separate case on the issue on December 7, 2012.

A reverse payment settlement is an agreement ending a pharmaceutical patent infringement suit under which a putative patent holder agrees to compensate an alleged infringer, typically a generic firm, to settle a patent infringement case. In exchange, the alleged infringer agrees not to challenge the patent holder's patent or sell a generic version of the drug for a stated term. Because the payment flows from the plaintiff to the defendant, it has been called a "reverse" payment.

This Note argues that any standard of antitrust review for reverse payment settlements must involve an evaluation of the patent's strength at the time the patent holder and generic firm enter into a settlement. The Court of Appeals for the Federal Circuit is the court of competent jurisdiction to review a district court's evaluation of a patent's strength. Part I reviews reverse payment settlements generally and the statutory schemes that promote their emergence. Part II presents three approaches the circuit courts have adopted to review reverse payment settlements: *per se* illegality, a rebuttable presumption of illegality, and the scope of the patent test. Part III argues that any standard of antitrust scrutiny must consider the patent's strength at the time of the settlement — an approach no circuit has yet adopted — and that the Federal Circuit is the proper appellate court to review patent strength.

### **Patent settlements in the pharmaceutical industry: an antitrust perspective**

Jonas Severin Frank and Wolfgang Kerber

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2277508](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2277508)

Patent settlements between originator and generic firms in the pharmaceutical industry are a controversial topic, both in EU competition policy and U.S. antitrust law. The main concern is that patent settlements, which involve large payments from the originator to generic firms (reverse payments) and simultaneously restrict or delay market entry of generic firms, might have to be regarded as anti-competitive agreements that protect weak and perhaps unjustified patents from challenges. Therefore, certain types of patent settlements might harm consumers, both by defending unjustifiable patents and restricting competition by generic firms. In this article, we use the dispute in U.S. antitrust law between the U.S. antitrust authorities and various U.S. courts about how to deal with patent settlements with reverse payments as a starting point for an economic analysis of this problem. We particularly focus on two aspects: (1) Patent settlements have also to be seen as potentially endangering the already weak mechanisms within patent law for challenging and weeding out weak patents. (2) The incentives for originator and generic firms for negotiating patent settlements depend crucially on the entire institutional framework in pharmaceutical markets. Therefore, the competitive assessment of patent settlements requires the analysis of the interplay between patent law rules, the regulations for drug approval (FDA regulations in the U.S.), antitrust law rules, and, in the U.S., the Hatch-Waxman Act with its specific rules for the relation between originator and generic firms. Important conclusions are the need for a much deeper analysis of this interplay of different regulations, and the insight that the U.S. criteria for assessing patent settlements might not be directly transferable to the EU, due to different institutional frameworks for pharmaceutical markets.

# IP & Innovation

## Patent law and the sociology of innovation

Laura G. Pedraza-Farina

*Wisconsin Law Review*, Vol. 2013, No. 3, 2013

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2269387](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2269387)

Francis Bacon stressed centuries ago that innovation is inevitably influenced by mental and social constraints. It is only by exposing and understanding these constraints, Bacon argued, that society can fully benefit from scientific innovation. But while historians and sociologists of science and technology have long appreciated how institutional norms shape the course, pace, and content of innovation, legal scholarship on patent law has all but ignored this insight. In this Article, I seek to complement traditional law and economic analyses of patent law by developing a sociological and historical approach that focuses in concrete detail on the ways in which scientific knowledge, and thus innovation, is made, maintained, and modified.

Rather than focus on individuals and their cognitive abilities as the drivers of innovation, a sociological view of innovation emphasizes the central role of communities of practice in which individual inventors are embedded. Interactions across and within communities of practice influence the speed of innovation. Innovative delay often arises when vested community interests in particular research tools, approaches, and questions block the migration of tools and ideas across communities. Within each community, reliance on interpersonal relationships of trust and authority to determine which research programs and methodologies are legitimate and interesting can also lead to innovative delay. Similarly, periods of fast innovative activity often have sociological explanations. For example, a particular line of research long ignored may become a “hot” topic of research when backed by a high-status intellectual actor.

This socio-historical approach is responsive to recent Supreme Court patent law jurisprudence, exemplified by *KSR v. Teleflex*, that directs courts to take a flexible approach to patentability by considering “the circumstances surrounding the origin of the invention.” Understanding why some scientific innovations take a long time to develop or be endorsed by the scientific community provides an opportunity to reshape patent law as a policy lever to mitigate such delays. Conversely, understanding why other types of innovation occur rapidly and spark swift follow-on innovation calls attention to circumstances in which broad patent rights may impose particularly high social costs. By teasing out social factors that influence the pace of innovation, I offer a framework for taking such considerations into account in the design and application of patent law. I also propose specific changes to patent law doctrine that flow from this framework.

## Who is afraid of pirates? An experiment on the deterrence of innovation by imitation

Christoph Engel and Marco Kleine

*MPI Collective Goods Preprint*, No. 2013/7

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2269635](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2269635)

In the policy debate, intellectual property is often justified by what seems to be a straightforward argument: if innovators are not protected against others appropriating their ideas, incentives for innovation are suboptimally low. Now in most industries for most potential users, appropriating a foreign innovation is itself an investment decision fraught with cost and risk. Nonetheless standard theory predicts too little innovation. Arguably the problem is exacerbated by innovators’ risk aversion as well as their aversion against others benefiting from their efforts without contributing to the cost, and without bearing innovation

risk. We model the situation as a game and test it in the lab. We find even more appropriation than predicted by standard theory. But the risk and the experience of appropriation does not deter innovation. We find even more innovation than predicted by theory, and actually more than would be efficient. In the lab, the prospect of giving imitators a free lunch does not have a chilling effect on innovation.

### **Lending to innovative firms: the role of lender expertise and control rights**

Sudheer Chava, Vikram K. Nanda, and Steven Chong Xiao

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2270740](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2270740)

Is bank financing compatible with innovation? We examine whether banks -- particularly those experienced in lending to innovative firms -- recognize the value of a firm's intellectual property, as concretized by patent stock, in pricing loans ex ante and in exercising control rights ex post, if covenants are subsequently violated. Our empirical evidence suggests that lending by experienced banks is consonant with the financing of innovative activity. First, innovative firms receive cheaper loans, particularly from experienced banks, when their patents are well cited and more general. Endogeneity concerns are allayed by showing that the effect of patents on borrowing costs is greater after exogenous legal changes that strengthened patent protection. Second, when covenants are violated and control rights pass to lenders, experienced lenders cut R&D significantly, particularly when the violating firm has lower R&D efficiency. The stock market response is generally more positive following technical covenant violations by innovative firms when the bank is experienced.

### **The importance (or not) of patents to UK firms**

Bronwyn H. Hall, Christian Helmers, Thomas Juster, and Vania Sena

*NBER Working Paper No. w19089*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2272524](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2272524)

A surprisingly small number of innovative firms use the patent system. In the UK, the share of firms patenting among those reporting that they have innovated is about 4%. Survey data from the same firms support the idea that they do not consider patents or other forms of registered IP as important as informal IP for protecting inventions. We show that there are a number of explanations for these findings: most firms are SMEs, many innovations are new to the firm, but not to the market, and many sectors are not patent active. We find evidence pointing to a positive association between patenting and innovative performance measured as turnover due to innovation, but not between patenting and subsequent employment growth. The analysis relies on a new integrated dataset for the UK that combines a range of data sources into a panel at the enterprise level.

## **IP Law & Policy**

### **Make the patent 'polluters' pay: using Pigovian fees to curb patent abuse**

James E. Bessen and Brian J. Love

*California Law Review Circuit (July 2013, Forthcoming)*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2277692](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2277692)

Inspired by a groundswell of public outrage against a recent spate of egregious patent enforcement targeting small businesses, five patent reform bills have been proposed in the last four months. All five

aim to curb nuisance-value patent litigation, a phenomenon popularly referred to as “patent trolling,” by reducing the cost of defending these suits. In this essay, we argue that these bills, while admirable, treat the symptoms of our patent system’s ills, rather than the disease itself: a growing glut of unused high-tech patents that have little practical value apart from use as vehicles for nuisance-value litigation. Accordingly, we urge Congress to consider one additional legislative fix: reforms to the way patent renewal (or “maintenance”) fees are calculated. Combining our own empirical research on the timing and costs of patent troll litigation with the concept of “Pigovian” taxation, we propose a new patent fee structure designed to induce the expiration of trivial patents before they wind up in the hands of bad actors. Doing so, we explain, would drive trolls out of business while sparing legitimate innovators from the same fate.

### **Exclusion is not automatic: improving the enforcement of ITC exclusion orders through notice, a test for close cases, and civil penalties**

Timothy Q. Li

*George Washington Law Review*, Vol. 81, No. 5, July 2013

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2274722](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2274722)

The U.S. International Trade Commission (“ITC”) has become increasingly important in the enforcement of intellectual property (“IP”) rights in recent years. Despite the increase in ITC filings, however, very little literature discusses the effectiveness of ITC exclusion orders. This Essay analyzes seventy-three ITC exclusion orders issued from 2002–2011, finding their scope to be imprecise and vague. Because of this lack of clarity, this Essay proposes that the ITC improve the enforcement of exclusion orders by providing notice to IP rightsholders, adopting a practical test to resolve close cases, and providing for a civil penalty to deter violations. More specifically, the ITC should provide notice to IP rightsholders when importers file certifications with Customs and Border Protection (“CBP”) or when CBP issues ex parte decisions concerning exclusion orders. The ITC should also adopt the colorable differences test used by some district courts to resolve close cases concerning redesigned products in contempt proceedings. Contempt proceedings share many similarities with ITC enforcement proceedings, including a prior patent infringement trial, a previous order by the tribunal against infringement, disagreement concerning redesigned products, and an expedited proceeding. Finally, the ITC should issue cease-and-desist orders in tandem with exclusion orders because cease-and-desist orders are enforceable with civil penalties. The most natural remedy to deter a violation of an exclusion order is an order to cease-and-desist from selling the infringing, imported products. By issuing cease-and-desist orders in tandem with exclusion orders, the ITC could eliminate duplicative enforcement proceedings, increase efficiency, and lower litigation costs.

### **Is patent claim interpretation review deference or correction driven?**

Christopher Anthony Cotropia

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2265962](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2265962)

This article examines the Federal Circuit’s review of claim constructions by lower tribunals to determine whether the Federal Circuit defers to lower court constructions or is making its own, independent determination as to the “correct” construction and ultimate result in the case.

The data collected from 2010 to March 2013 indicates that the Federal Circuit affirms over 75% of lower court claim interpretations. While this finding is itself surprising, even more surprising is that these reviews do not appear to be driven by deference. Instead, the Federal Circuit is unlikely to correct

constructions that resulted in patentee loss below, but the court is more likely to reverse claim constructions that resulted below in patentee wins. And these reversals occur even more frequently in cases involving electronics, information technologies, or business methods, while the opposite is true in biological and chemical technology cases.

These findings indicate that the Federal Circuit's review of claim interpretations is still truly *de novo* and performed to correct lower court decisions (a) where patentees win and (b) especially where patents covering electronics, information technologies, and business methods succeed.

### **The costs and benefits of United States patents**

John L. Turner, James E. Bessen, Peter Neuhäusler, and Jonathan W. Williams

*Boston Univ. School of Law, Public Law Research Paper No. 13-24*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2278255](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2278255)

We use a detailed data set to estimate the costs and benefits of United States patents. To estimate costs, we combine data from Derwent Litalert with a proprietary dataset of non-practicing entity (NPE) lawsuits collected by Patent Freedom, and use an event study approach to estimate losses suffered by alleged infringers during 1984-2009. To estimate benefits, we combine patent data from the USPTO and EPO with financial data from CRSP and COMPUSTAT, and use market-value regressions to estimate the value of patent rents for publicly-traded US firms during 1979-2002. We find that costs exceed benefits overall and that the gap between costs and benefits has grown across time. Surges in the number of NPE lawsuits, lawsuits filed over Computers/Communications patents, and lawsuits brought against non-manufacturing, software and telecommunications firms contribute to the increase in the gap. Growth in costs outstrips growth in lawsuits, in part, because events in these fast-growing categories have higher-than-average per-event dollar costs.

### **The audience in intellectual property infringement**

Jeanne C. Fromer and Mark A. Lemley

*Michigan Law Review, Vol. 112 (2014), Forthcoming*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2272235](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2272235)

Every IP right has its own definition of infringement. In this paper, we suggest that this diversity of legal rules is largely traceable to differences in the audience in IP cases. Patent, trademark, copyright, and design patent each focus on a different person as the fulcrum for evaluating IP infringement. The fact that patent law focuses on an expert audience while trademark looks to a consumer audience explains many of the differences in how patent and trademark cases are decided. Expert audiences are likely to evaluate infringement based on the technical similarity between the plaintiff's and defendant's works. Consumers, by contrast, are likely to pay more attention to market substitution and less attention to how things work under the hood. Understanding the different audiences in IP infringement is critical to understanding how the IP regimes define infringement.

The focus on audience has normative as well as descriptive implications. Neither patent law, with its focus on experts and technical similarity, nor trademark law, with its market-based consumer focus, has it entirely correct. Rather, we suggest that as a general matter infringement of an IP right should require both technical similarity and market substitution. Assessing infringement through the expert's eyes ensures that the law prevents closely related works in the field while allowing later contributions to the field that are sufficiently different. The consumer vantage point ensures that we protect IP owners only when they have been harmed in the marketplace.

IP owners who want to show infringement should have to show both that the defendant's work is technically similar to their own from the expert's vantage point and that the defendant's use causes the plaintiff market harm. Copyright law, which does look both to experts and to consumers at various points in infringement analysis, is on the right track.

### **Across five eras: patent enforcement in the United States 1929-2006**

Matthew Henry and John L. Turner

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2274383](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2274383)

In this paper, we use univariate structural break analysis to estimate rates of patent enforcement in infringement suits in the United States over 1929-2006. We separately estimate rates of validity and infringement for series constructed with district court and appellate court decisions. We find multiple structural breaks in series of both validity and infringement, and find that the breaks do not coincide. Our most reliable results suggest the rate of validity falls around 1939 and rises around 1983, and that the rate of infringement rises around 1951 and falls around 1990. We estimate an overall rate of winning on both validity and infringement to be between 27-29% for all years except for 1939-51 (when it falls to about 20%) and 1983-90 (when it rises to nearly 50%).

### **Conflict resolution, public goods and patent thickets**

Dietmar Harhoff, Georg Von Graevenitz, and Stefan Wagner

*CEPR Discussion Paper No. DP9468*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2266280](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2266280)

Post-grant validity challenges at patent offices rely on the private initiative of third parties to correct mistakes made by patent offices. We hypothesize that incentives to bring post-grant validity challenges are reduced when many firms benefit from revocation of a patent and when firms are caught up in patent thickets. Using data on opposition against patents at the European Patent Office we show that opposition decreases in fields in which many others profit from patent revocations. Moreover, in fields with a large number of mutually blocking patents the incidence of opposition is sharply reduced, particularly among large firms and firms that are caught up directly in patent thickets. These findings indicate that post-grant patent review may not constitute an effective correction device for erroneous patent grants in technologies affected by either patent thickets or highly dispersed patent ownership.

## Copyright Law

### **Brief of software innovators, start-ups, and investors as amici curiae in Oracle v. Google**

Jennifer M. Urban

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2272173](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2272173)

This case raises critical questions about how far copyright extends into the basic communication tools -- Application Programming Interfaces (APIs) -- that are presently ubiquitous in the Web environment and software development generally. APIs establish basic interoperability between systems, between applications and systems, and between applications themselves.



This kind of interoperability between programs and systems is foundational to software innovation, as well as to computer systems and ecosystems themselves. Because of this, how copyright's default rules affect interoperability is central to how innovation happens on the ground. These rules have been stable for many years. *Baker v. Selden*, which was decided in 1879, established that copyright law extends only to creative expression and not to ideas; section 102(b) of the 1976 Copyright Act makes clear that copyright does not cover methods of operation, procedures, processes, or systems; and courts, especially in the Ninth Circuit, have explained how these concepts apply directly to interoperability needs.

In the case, Oracle is arguing that high-level aspects of the Java APIs are copyrightable, and so that Google has infringed its copyrights in the Java APIs by using some of them to create a Java implementation for Android. The district court ruled that the elements of the Java APIs at issue are not copyrightable, and that Google had therefore not infringed. The Federal Circuit is now reviewing the case on appeal.

In this amicus brief, a wide range of start-up companies, their investors, and innovators, including those who were involved in the similar *Lotus v. Borland* case thirty years ago, ask the court to consider the impact changing copyright boundaries would have on innovation and investment. It explains how innovators rely on APIs, and how limitations on copyright undergird innovation and competition in the software and Internet spaces. The brief argues that the district court's ruling was correct, and urges the court to preserve the longstanding limitations on copyright in computer programs. It explains that doing otherwise harm what is presently a vital and robust industry, chilling both innovation and the investment that supports it.

### **Performance anxiety: copyright embodied and disembodied**

Rebecca Tushnet

*Journal of the Copyright Society of the U.S.A.*, Forthcoming

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2264277](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2264277)

The primary economic and cultural significance of copyright today comes from works and rights that weren't contemplated by the Framers of the Constitution's Copyright Clause. Performance — both as protected work and as right — is where much of copyright's expansion has had its greatest impact, as new technologies have made it possible to fix performances in records and films and as cultural change has propelled recorded music and audiovisual works to the forefront of the copyright industries. Yet copyright has never fully conceptualized performance, and this has led to persistent confusion about what copyright protects.

One key problem of performance from copyright's perspective is how to identify the creative elements that make a work of performance original and protectable, as distinguished from elements that make it a work (a fixed artifact). A major variant of this question involves authorship: who is sufficiently responsible for a work of performance to be deemed its author, and thus its default owner? In a world where works require dozens and even hundreds of people to complete them, this question will often be difficult to answer while both respecting creativity and recognizing economic imperatives. Another set of questions involves whether there are ways to recognize performers' creative contributions without contributing to copyright's bloat, and how to assess claims of infringement in a performance context when the alleged copying isn't exact. This article addresses these puzzles of performance, arguing that manageability rather than creativity is generally the basis for the rights allocations and distinctions copyright law makes. The recent controversy over the film *Innocence of Muslims*, along with other instances in which subjects of audiovisual works claimed copyright in those works, demonstrate the limited role played by creativity in copyright law.

## IP & Biotechnology

### **Corporate power unbound: investor-state arbitration of IP monopolies on medicines – Eli Lilly and the TPP**

Brook K. Baker

*Northeastern University School of Law Research Paper No. 139-2013*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2266507](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2266507)

Free trade agreements (FTAs) and bilateral investment treaties (BITs) typically contain investment clauses designed to attract direct foreign investment and protect the interests of foreign investors. In addition to defining foreign investment that are entitled to protection, investment clauses typically allow for investor-state dispute resolution, which allows a foreign investor to launch arbitral proceedings directly against the offending government before a private panel of trade lawyers. This paper focuses first on a pro-investor draft investment chapter in an ongoing regional trade negotiation – the Trans-Pacific Partnership Agreement (TPP) – and second on the first investor-state arbitral claim ever by a patent-holding pharmaceutical company under a U.S. free trade agreement, the Eli Lilly v. Canada case. The analysis of the draft TPP chapter shows that it expands protection for drug companies’ “expectations of profit” beyond those contained in the TPP’s proposed Intellectual Property Chapter and risks opening up many patent-affecting decisions and policies of Member States to pharmaceutical investors’ claims. As an example of that danger, Eli Lilly is currently challenging a well-established patent rule in Canada, the “promise” doctrine, whereby a medicine or any other product’s “utility,” and thus patentability, must be demonstrated or soundly predicted at the time of filing a patent. Eli Lilly, frustrated by the invalidation of its patent on an attention-deficit-disorder drug, makes a number of specific investment chapter claims under NAFTA, including that the Canadian ruling involved a violation of a minimum standard of treatment, indirect expropriation, and discrimination in violation of national treatment norms. A recurrent, indeed dominant feature of Eli Lilly’s investor claim, is that its reasonable expectations of profits may be drawn not just from preexisting Canadian laws and practices, but rather from higher external standards such as utility rules and disclosure norms codified in U.S. and E.U. law. Under the logic of Eli Lilly’s investor-state claim, foreign investors’ expectations have now become unbound. Even the doctrine of legitimate expectations, which is itself a huge stretch of operative minimum standard of treatment principles, is no longer tethered to operative due process (minimum standard of treatment) or to promises of regulatory coherence (indirect expropriation) or to equal treatment compared to domestic firms (national treatment). Instead Eli Lilly hitches its investment expectation to the best deal on IP it has achieved anywhere else. Moreover, it suggests that its expectations tolerate movement on IP policy in only one direction – upward. Any reversal of IP maximalization would dilute the gleam in its eye – unlimited profits on the horizon.

### **Patentability and scope of protection for DNA sequence-related inventions from the perspective of the United States of America and Europe**

Radoslav M. Milkov

*Journal of Intellectual Property, Information Technology and Electronic Commerce Law, Vol. 4, p. 36, 2013*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2277314](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2277314)

Since the mapping of the human genome and the technical innovations in the field of biotechnology, patent law has gone through great controversies. Protection is required for an investor to make an investment but how broad should the given protection be? Whether the invention is a micro-organism capable of dissolving crude oil, or the gene of a soya plant, the genetic engineering required for their production entails vast amounts of capital. The policy in that respect is tailored by legislative acts and

judicial decisions, ensuring a fair balance between the interests of patent right holders and third parties. However, the policy differs from jurisdiction to jurisdiction, thus creating inconsistencies with regards to the given protection to the same invention, and as a result this could deter innovation and promote stagnation. The most active actors shaping the patent policy on an international level are the patent offices of the United States of America, Japan and the European Patent Organization. These three patent offices have set up a cooperation programme in order to promote and improve efficiency with regards to their patent policies on a global scale. However, recent judicial developments have shown that the policy in respect to the field of biotechnology differs between the patent regimes of the United States of America and the two-layer system of the European Patent Organisation/the European Union.

## Other IP Topics

### The natural complexity of patent eligibility

Jacob S. Sherkow

*99 Iowa Law Review, 2014, Forthcoming*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2268180](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2268180)

It has long been assumed that the doctrine of patent eligibility's prohibition of patents on "laws of nature," "natural phenomena," and "products of nature" rests on legalistic interpretations of those terms. But there is good reason to doubt this assumption. Since the doctrine's inception, the Supreme Court has yet to provide any framework, formula, or factors explaining these "natural" terms. Rather, the Court has increasingly fixated on a list of scientific tropes, such as gravity, the heat of the Sun, and extracted metals, that it believes are true examples of "natural laws," "phenomena," and "products."

An actual examination of scientific philosophy, however, demonstrates that these concepts are anything but true examples of "natural laws," "phenomena," and "products." And one branch of scientific philosophy in particular, natural complexity, focuses on why such terms are ultimately unworkable today. This disconnect between patent eligibility's appeal to science and natural complexity's agnosticism of patent eligibility's terms explains some of the problems patentable eligibility faces today in applying the terms "laws of nature," "natural phenomena" and "products of nature" to current technologies.

Interestingly, the solution to these difficulties may lie in recognizing that the doctrine of patent eligibility is, itself, complex: that rather than breaking down its analysis into cognitively easier subparts, it operates under the burden of a complicated and unworkable whole. Solutions to analogous scientific problems revolve around the strategies of "decomposition" and "localization," i.e., "decomposing" a system into cognitively manageable subparts and "localizing" those subparts to functions of the overall system. In this way, researchers can develop a coherent description of the system as a whole. While this may appear inapplicable to the law, other complex areas of jurisprudence use this methodology to break down high-order, generalized questions into separate "factors" or "prongs" that map to the law's substantive purposes. Harnessing decomposition and localization for patent eligibility — rather than attempting to resolve the grander question of what a "natural law" is — may go a long way in developing a coherent, legalistic, and yet simple framework to the century-and-a-half old doctrine.

## **The copyright/patent boundary**

Viva Moffat

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[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2273840](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2273840)

Since the passage of the 1976 Copyright Act, the scope of protection for industrial design has been one of the most troublesome areas of copyright law. Many everyday items, from smart phones and gaming devices to bicycle racks and clothing mannequins, blend form — which is protected by copyright law — and function — protected by patent — and therefore lie at the boundary of the two areas of law. Courts and scholars have persistently struggled with copyright's useful article doctrine, which seeks to delineate that boundary, but none of the approaches has proved to be either practically or theoretically satisfying.

This article proposes a default rule that differs both from the current law and many reform proposals because it demands acknowledgement that the useful article doctrine is not about copyright law, at least not entirely. The useful article doctrine is a channeling doctrine meant to direct certain works — useful things like items of industrial design — away from copyright law so that designers do not have an incentive to avoid patent law's more stringent requirements by obtaining copyright protection instead. The doctrine can serve this channeling function, however, only if it draws a clear line that errs on the side of ensuring that useful articles do not receive copyright protection.

To accomplish this, the courts should borrow from trademark's functionality doctrine. First and foremost, when the useful article doctrine is raised as a defense, the burden should shift to the copyright proponent to prove that the item sought to be copyrighted is not "useful." Even without more, this shift in the default rule would draw a much brighter line, deterring designers from pursuing copyright protection and litigation and channeling industrial design away from copyright and toward patent. This will admittedly result in the exclusion from copyright of original expression that would in every other respect qualify. But this is as it should be. Copyright is not the appropriate form of protection for items of industrial design; copyright's rule should reflect that.

## **Patent strategies in the process-related industries: outline of the problems**

Martin P. Schmidt

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[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2268849](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2268849)

Patents are the only way to obtain a legally enforceable monopoly allowing to exclude others. Building an efficient patent strategy is more difficult in process-related industries than in product-oriented industries because the impact of the existence of the monopoly on the market situation is much more difficult to forecast for process-related inventions than for product innovation. The common distinction between product patents (or product claims) and process patents (or process claims) is of little use for approaching this question. A simple four-step approach is presented here, based on the operative decisions that need to be taken. Two illustrative examples show how to apply this approach and how to deepen the analysis of real situations.

## About the editor

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