January 2018

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

Dark sides of patent pools with independent licensing

Akifumi Ishihara (National Graduate Institute for Policy Studies (GRIPS))
Noriyuki Yanagawa (University of Tokyo – Faculty of Economics)
Working paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2885620

This study examines the welfare effects of patent pools with independent licensing. We argue that forcing patent pools to allow each individual patent holder to license the technology independently does not necessarily work as a screening tool to select only desirable patent pools. We consider a duopolistic model in which some users demand only specific technologies. We demonstrate that a patent pool with independent licensing enables patent holders to undertake anti-competitive price discrimination. Moreover, since forming a patent pool mitigates the price competition forced by lower grade entrants, combination with independent licensing might worsen welfare further.

Patent pools and related technology sharing

Erik Hovenkamp (Harvard Law School; Yale Law School)
Herbert Hovenkamp (University of Pennsylvania Law School; University of Pennsylvania – The Wharton School; University College London)
Cambridge Handbook of Antitrust, Intellectual Property, and High Tech (Roger D. Blair & D. Daniel Sokol, eds. 2017)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2645905

A patent “pool” is an arrangement under which patent holders in a common technology commit their patents to a single holder, who then licenses them out to the original patentees and perhaps also to outsiders. The payoffs include both revenue earned as a licensor, and technology acquired by pool members as licensees. Public effects can also be significant. For example, technology sharing of complementary patents can improve product quality and variety. In some information technology markets

pools can prevent patents from becoming a costly obstacle to innovation by clearing channels of technology transfer. By contrast, a pool's aggregate output reduction or price fixing in a product market can produce cartel profits.

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

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

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

Patent pool outsiders

Michael Mattioli (Indiana University Maurer School of Law)
Berkeley Technology Law Journal, Vol. 33, No. 1, 2018, Forthcoming
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3012633

Individuals who decline to join cooperative groups — outsiders — raise concerns in many areas of law and policy. From trade policy to climate agreements to class action procedures, the fundamental concern is the same: a single member of the group who drops out could weaken the remaining union. This Article analyzes the outsider problem as it affects patents.

The outsider question has important bearing on patent and antitrust policy. By centralizing and simplifying complex patent licensing deals, patent pools conserve tremendous transaction costs. This allows for the widespread production and competitive sale of many useful technologies, particularly in the consumer electronics industry. Because these transaction cost savings appear to outweigh the most common competition-related concerns patent pools raise, antitrust authorities generally view these private pools favorably.
Others are less sanguine. Most patent pools are incomplete: for the technologies they cover, not all relevant patents are included. The reason for this is understandable: patent holders sometimes believe they can negotiate for higher royalties by declining to join an existing pool. Antitrust regulators are aware of this behavior, but do not worry much about it. A growing number of economists and legal scholars believe, however, that this outsider behavior may impose higher costs on pool licensees, detracting from the central benefit that patent pools offer — transaction cost savings. These commentators urge antitrust regulators to regard patent pools with greater caution and skepticism.

These calls for caution, however, are based mostly on theories about how patent pools should work, rather than empirical study. Remarkably, little research has been done to shed light on the actual impact of patent pool outsiders. Through an original ethnographic study, this Article seeks to remedy this gap. A set of the most notable and public episodes of outsider behavior were collected from industry press reports, case reports, and historical archives. Crucial new information was then gathered through interviews with lawyers and executives directly involved with the episodes studied.

The study reveals a characteristic of patent pools that has gone unappreciated until now: they subtly but powerfully influence bargains that take place “poolside” — i.e., deals between patent holders and licensees that take place “in the shadow” of the pool. This spill-over effect can beneficially limit the power that theorists have assumed outsiders to have. This is an unappreciated benefit of cooperation. The theorists, as it turns out, have not used the wrong approach, but rather, have been missing some important parameters.

To further aid regulators, this Article builds upon its qualitative findings by introducing a new quantitative technique for estimating the cost that a licensee either incurs or saves due to an outsider. Applying this technique to original financial and industry data gathered from research subjects, this Article shows that, counterintuitively, patent licensees are sometimes better-off where cooperation among licensors is partial, rather than complete. The inflection point lies where the royalty rate hike that a unified pool would need to charge to draw in an outsider is equal to the transaction costs that licensees would conserve by dealing with a single pool.

This study’s revelations have provocative implications that reach beyond patent law. Contrary to conventional wisdom, slightly fragmented property markets may sometimes be preferable to “grand coalitions.” There may exist in any given market for complementary patent rights (or other complementary property rights), an optimal level of diffusion of ownership that resides between total diffusion and total concentration. Some cooperation may not only be better than none, but also better than more.

Drawing upon this study, antitrust regulators who must evaluate patent pools can assemble a clearer and more complete understanding of their overall costs and benefits — a topic that Robert Merges and I recently wrote on in a related article. This Article is also helpful beyond patent law. The ethnographic methodology followed here reveals dynamics between outsiders and groups that theory alone has not

captured. Scholars concerned with outsiders in other areas of law and policy can refine and build upon theory by applying a similar ethnographic approach.

IP & Licensing

Validity of non-disclosure agreements in SEP licensing

Vikas Kathuria (Bennett University)
Jessica C. Lai (Victoria University of Wellington)
European Intellectual Property Review, Forthcoming
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3092219

Requiring a Non-Disclosure Agreements (NDAs) is a common business practice used to safeguard the commercial interests of a licensor and a licensee in intellectual property licensing matters. The recent litigation involving Standard Essential Patents (SEP) has, however, raised doubts over the practice of patentees requiring NDAs before licensing SEPs to putative licensees. It has been argued that the inclusion of royalty rates in NDAs leads to discriminatory pricing of technology — a violation of the commitment to license under fair, reasonable and non-discriminatory (FRAND) terms. That is, licensees cannot know if they receive non-discriminatory terms, if they cannot compare their licenses due to NDAs. This article examines this issue from both theoretical and practical perspectives, and concludes that the inclusion of royalty rates in NDAs may be justified in view of the technological and commercial realities involved in SEP licensing.

IP & Innovation

Hidden costs of free patents

Liza Vertinsky (Emory University School of Law)
Ohio State Law Journal, Forthcoming
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3092957

A growing number of companies, including some of the world's largest patent holders, appear to be giving patent rights away for free. These companies are making patent pledges, defined here as voluntary unilateral promises to the public to limit the enforcement of their patents. While these pledges are widely celebrated as socially beneficial efforts to mitigate the negative impact of patents on open innovation, this article challenges the conventional wisdom. Just as there is no free lunch, there is no free patent. The article shows that patent pledges can sometimes create hidden costs for innovation that the law is not currently equipped to deal with. It identifies three ways in which patent pledges can create social costs: (1) enhanced opportunities for patent hold-up; (2) foreclosure of alternative technology paths; and (3) use of pledges to create entry barriers. These costs arise where patent holders exploit limitations in the legal framework governing patent pledges along with private information about their intellectual property and business strategies to act opportunistically. Drawing from other areas of law in which similar problems of opportunism occur, the article applies Professor Henry Smith's theory of equity as a second-order safety valve for law to show how these costs could be mitigated through limited expansion of equitable doctrines within patent law.

Digital ‘mash-ups,’ patents, and copyright

Kevin Boudreau (Northeastern University – Innovation & Entrepreneurship; Dept. of Economics; College of Computer & Information Sciences; Harvard University – Institute for Quantitative Social Science; National Bureau of Economic Research (NBER))
Lars Bo Jeppesen (Copenhagen Business School – Department of Innovation and Organizational Economics)
Milan Miric (University of Southern California, Marshall School of Business)
Working paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3097643

Are our intellectual property (IP) institutions effective for a new generation of digital innovations? To make progress on this question, this paper analyzes a novel dataset on mobile app developers’ use of patents and copyright, product revenues, licensing and outsourcing, and product and developer characteristics. We find within-industry heterogeneity in patent and copyright use, even among seemingly similar suppliers selling similar products. This pattern of IP use, along with consequent revenues and propensity to engage in IP trade is closely associated with the specific nature of innovations embodied in the products. Therefore, whereas patent and copyright use historically have differed across industries while tending to be similar across suppliers within the same industry, the “mash-up” nature of digital products (amalgams of programs, datasets, graphics, algorithms, etc.) results in unusually finer-grained differences within industries. Pliant digital product development choices and IP choices go hand-in-hand.

Knowledge spillovers and learning in the workplace: evidence from the U.S. Patent Office

Michael Frakes (Duke University School of Law)
Melissa F. Wasserman (The University of Texas at Austin – School of Law)
Working paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3099029

Using application-level data from the Patent Office from 2001 to 2012, merged with personnel data on patent examiners, we explore the extent to which the key decision of examiners — whether to allow a patent — is shaped by the granting styles of her surrounding peers. Taking a number of methodological approaches to dealing with the common obstacles facing peer-effects investigations, we document strong evidence of peer influence. For instance, in the face of a one standard-deviation increase in the grant rate of her peer group, an examiner in her first two years at the Patent Office will experience a 0.15 standard-deviation increase in her own grant rate. Moreover, we document a number of markers suggesting that such influences arise, at least in part, through knowledge spillovers among examiners, as distinct from peer-pressure mechanisms. We even find evidence that some amount of these spillovers may reflect knowledge flows regarding specific pieces of prior art that bear on the patentability of the applications in question, as opposed to just knowledge flows regarding general examination styles. Finally, we find evidence suggesting that the magnitude of these peer examiner influences are just as strong, or stronger, than the influence of the examination styles of supervisors.

IP & Litigation

Adverse inference of intent to deceive USPTO as a sanction for litigation misconduct

Janice M. Mueller (Chisum Patent Academy)
Mueller on Patent Law, Vol. II (Patent Enforcement) (Wolters Kluwer 2014) (annual update 2018, Forthcoming)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3095007

In a July 2017 decision, Regeneron Pharms., Inc. v. Merus N.V. ("Regeneron II"), a divided panel of the U.S. Court of Appeals for the Federal Circuit affirmed the Southern District of New York's judgment that Regeneron's asserted patent was unenforceable for inequitable conduct in its prosecution. The full Circuit denied rehearing en banc by a 10-2 vote in December 2017. The notable and troubling aspect of Regeneron II is the panel majority's approval of the district court's imposition of a sanction against the patentee for its misconduct in the infringement litigation with Merus. Much of that litigation misconduct involved Regeneron's failure (having waived attorney-client privilege) to produce documents requested during discovery that pertained to its prosecuting attorneys' decision not to submit certain prior art references to the USPTO.

The Federal Circuit was not mistaken in reading Second Circuit precedent as conferring broad discretion on district courts to fashion appropriate sanctions, including imposing adverse inferences. Nevertheless, the substance of the district court's adverse inference dealt with a key component of inequitable conduct—intent to deceive the USPTO—unquestionably a matter of substantive patent law on which Federal Circuit law controls. Although not without its critics, the Circuit's 2011 en banc decision in Therasense is, for better or worse, the current defining framework for establishing inequitable conduct. Therasense tightened the standards for rendering patents unenforceable in an attempt to stem a perceived "plague" of inequitable conduct accusations. The en banc court required that the deceptive intent prong of inequitable conduct be independently proved based on clear and convincing evidence. By relying on Second Circuit law dealing with litigation sanctions and adverse inferences generally, the Regeneron II majority allowed satisfaction of Therasense's substantial evidentiary burden of proof by a court imposing an adverse inference as a sanction for litigation misconduct, without conducting any evidentiary hearing or trial, on the fact question of intent to deceive the USPTO.

TCL v. Ericsson: the first major U.S. top-down FRAND royalty decision

Jorge L. Contreras (University of Utah – S.J. Quinney College of Law)
Patently-O, Dec. 27, 2017
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3100976

On December 21, 2017, the U.S. District Court for the Central District of California released its long-awaited Memorandum of Findings of Fact and Conclusions of Law in TCL Communications v. Ericsson. In a lengthy and carefully crafted decision, Judge James Selna sets forth some important new points regarding the calculation of fair, reasonable and non-discriminatory (FRAND) royalties for standards-essential patents (SEPs). Among other things, the decision offers a strong endorsement of "top down" methodologies for the calculation of SEP royalties, and makes significant use of the non-discrimination (ND) prong of the FRAND commitment in arriving at a FRAND royalty rate. Equally importantly, the case establishes that, for non-discrimination purposes, even low end vendors like TCL will be considered "similarly situated" to high end vendors like Apple, giving them the benefit of the rates that high end vendors can negotiate with SEP holders for far more expensive consumer products.

Cisco Systems, Inc. v. Arista Networks, Inc., brief amicus curiae of copyright law Professor Pamela Samuelson

Pamela Samuelson (University of California, Berkeley – School of Law)
Working paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3095819

The scenes a faire doctrine, which recognizes elements of a work that are stock, rudimentary, or that arise naturally from a particular theme or setting, is a flexible and capacious limitation on copyright protection that can shield defendants from copyright liability. There are at least five senses in which the scenes a faire doctrine may apply in software copyright cases, including when infringement claims are based on the defendant's reuse of program command terms. First, program command terms can be scenes a faire insofar as they incorporate official industry standard terms. Second, program commands that are common or stock elements likely to be found in software of that kind may be scenes a faire elements. Third, program commands can also be scenes a faire if they logically flow from the functions to be performed. Fourth, program command terms can be scenes a faire if external factors, including market expectations, constrain programmers' choices of command terms. Fifth, under controlling Ninth Circuit precedents, program commands, like other user interface elements, can, by virtue of longstanding use in an industry, become standards in that industry, and hence scenes a faire elements.

At trial, insofar as the jury heard evidence that Cisco's command-line interface ("CLI") terms were standards in one or more of these senses, it could reasonably have concluded that so many elements of the claimed compilation of terms were scenes a faire that Arista's use of those terms did not infringe. Such a finding is especially likely and appropriate given that compilations of program command terms are generally more functional than expressive. In some cases, program command terms, like functional compilations more generally, have been adjudged too functional to be protectable by copyright law. Some functional compilations, though protectable, have enjoyed a very thin scope of protection. The U.S. Court of Appeals for the Federal Circuit should be skeptical of Cisco's claim that the CLI elements used by Arista are in themselves a protectable work of authorship that Arista infringed, because those commands were subsets of a larger set of command terms and many were scenes a faire elements.

IP Law & Policy

Tax solutions to patent damages

Jennifer Blouin (University of Pennsylvania – Accounting Department)
Melissa F. Wasserman (The University of Texas at Austin – School of Law)
Texas Intellectual Property Law Journal, (Invited Symposium Contribution) Forthcoming
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3099060

The calculation of patent damages lies at the epicenter of patent policy, yet it remains one of the most contentious issues in all of intellectual property law. The dominant legal framework equates a reasonable royalty, the most prevalent patent damage award, to a hypothetical negotiation between the parties at the time infringement began. Commentators and courts generally agree that existing comparable patent licenses, which represent arms'-length transaction between two unrelated private parties that places a monetary value on the patent, are highly probative in determining a reasonable royalty. The lack of publicly available licensing data, however, limits the ability of courts to identity appropriate comparable licenses. In this paper, we argue that there is a large untapped trove of information on existing patent

licensing agreements, many of which are likely more probative to reasonable royalty calculation than currently existing licensing data offered by patent damage experts. This novel source of data is tax-related “transfer prices.”

Computer-generated inventions

Michael McLaughlin (American University Washington College of Law)
Working paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3097822

Technological advancements in artificial intelligence have threatened the axiom that conception, the mental part of invention, is a function exclusive to the human mind. Recently, machine learning technologies have allowed artificially intelligent computers to compose patent claims that amount to patentable subject matter. This technology is similarly used by innovators to optimize design configurations beyond the scope of human capacity. The type of patent protection to be afforded to computer-assisted and computer-generated inventions without human intervention has yet to be determined. To help bridge the gap, this article will illuminate how such technological advances could wreak havoc on the patent legal system as it currently stands and offer a proposal that will focus on a fundamental understanding of what qualities constitute inventorship and the philosophical justifications for property rights. This proposed solution examines why allowing computer-generated patents would contradict the underlying societal incentives behind the patent system and why innovation would not be stifled as a result of regulation. The resulting conclusion seeks to offer the legislature and judiciary a framework for determining the amount of human intervention required to ensure protection against the computer-assisted or computer-generated patent.

CRISPR, patents, and the public health

Jacob S. Sherkow (New York Law School; Columbia University – Department of Health Policy and Management; Center for Advanced Studies in Biomedical Innovation Law)
Yale Journal of Biology and Medicine, vol. 90, pp. 667-672 (2017)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3093610

Patent issues surrounding CRISPR, the revolutionary genetic editing technology, may have important implications for the public health. Patents maintain high prices for novel therapies, limiting patient access. Relatedly, insurance coverage for expensive therapies is waning. Patents also misallocate research and development resources to profitable disease indications rather than those that necessarily impinge on the public health. And it is unclear how CRISPR therapies will figure into the current regulatory framework for biosimilars. Policy makers and physicians should consider these issues now, before CRISPR therapies become widely adopted—and entrenched—in the marketplace.

Copyright Law

Re-imagining digital copyright through the power of imitation: lessons from Confucius and Plato

Giancarlo Frosio (Université de Strasbourg – CEIPI; Stanford University – Stanford Law School Center for Internet and Society)
5 Peking University Transnational Law Journal (Forthcoming)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3094316

For millennia, Western and Eastern culture shared a common creative paradigm. From Confucian China, across the Hindu Kush with the Indian Mahābhārata, the Bible, the Koran and the Homeric epics, to Platonic mimēsis and Shakespeare's "borrowed feathers," our culture was created under a fully open regime of access to pre-existing expressions and re-use. Creativity used to be propelled by the power of imitation. However, modern policies have largely forgotten the cumulative and collaborative nature of creativity. Actually, the last three decades have witnessed an unprecedented expansion of intellectual property rights in sharp contrast with the open and participatory social norms governing creativity in the networked environment. Against this background, this paper discusses the reaction to traditional copyright policy and the emergence of a social movement re-imagining copyright according to a common tradition focusing on re-use, collaboration, access and cumulative creativity. This reaction builds upon copyright's growing irrelevance in the public mind, especially among younger generations in the digital environment, because of the emergence of new economics of digital content distribution in the Internet. Along the way, the rise of the users, and the demise of traditional gatekeepers, forced a process of reconsideration of copyright's rationale and welfare incentives. Scholarly and market alternatives to traditional copyright have been plenty, attempting to reconcile pre-modern, modern and post-modern creative paradigms. Building upon this body of research, proposals and practice, this Article will finally try to chart a roadmap for reform that reconnects Eastern and Western creative experience in light of a common past, looking for a shared future.

Deep copyright: up - and downstream questions related to artificial intelligence (AI) and machine learning (ML)

Daniel Schönberger (Google Inc. – Google Zürich)
Droit d'auteur 4.0 / Copyright 4.0, DE WERRA Jacques (ed.), Geneva / Zurich (Schulthess Editions Romandes) 2018, pp. 145-173.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3098315

Artificial intelligence (AI) systems are increasingly capable of taking over tasks that until recently required cognitive abilities, such as the creation of literary texts, melodies or images. Already commercial applications reach the market, whose outputs would arguably be considered as creative, if produced by a human author. Also, systems have become capable of translating all kinds of text including prose between dozens of languages. One enabler for this development is (deep) machine learning (ML), which may require input from copyrighted works to train the respective models in becoming "creative". The present essay discusses some of the legal and philosophical issues that arise from these developments, looking both at the status of the "downstream" generated works, and the possible constraints that copyright law might impose on the materials the systems need for learning and hence for their "upstream" modelling.

Fearless Girl meets Charging Bull: copyright and the regulation of intertextuality

Annemarie Bridy (University of Idaho – College of Law; Stanford Law School Center for Internet and Society)

UC Irvine Law Review, 2018, Forthcoming
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3099197

This article approaches the Fearless Girl/Charging Bull controversy as a case study in how copyright law regulates conditions of interaction between existing artistic works and new ones, in order to protect the value and integrity of the former without diminishing production of the latter. To assess the merits of sculptor Arturo DiModica's legal claims in light of the policies underlying copyright law, I turn to the theory of intertextuality and the work of two narrative theorists — M.M. Bakhtin and Gerard Genette. Bakhtin's concept of dialogism and Genette's concept of hypertextuality are especially useful for understanding how the intertextual relationship between Fearless Girl and Charging Bull fits within the range of work-to-work and author-to-author relationships with which literary theory and copyright law are mutually concerned.

Analyzing the Fearless Girl controversy through the concepts of dialogism and hypertextuality surfaces a clash between DiModica's Continental view of copyright as a guarantor of authorial supremacy and the utilitarian orientation of U.S. copyright law, which gives authors less control over "second-degree" texts than DiModica would like. My principal argument is that U.S. copyright law is hospitable to intertextuality by design — much more so than Continental author's rights law, which encodes what Bakhtin would characterize as a monologic aesthetics centered on the work as an extension of authorial personality. By giving narrow scope to moral rights and broad scope to fair use, in particular to critical and transformative secondary uses, U.S. copyright law limits the ability of artists like DiModica to control the public's perception of their works by dictating the terms on which other artists interact with them.

Other IP Topics

Patent protection for CRISPR: An ELSI review

Jacob S. Sherkow (New York Law School; Columbia University – Department of Health Policy and Management; Center for Advanced Studies in Biomedical Innovation Law)

Journal of Law and the Biosciences, Vol. 4 (2017) [lsx036]
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3093608

The revolutionary gene-editing technology, CRISPR, has raised numerous ethical, legal, and social concerns over its use. The technology is also subject to an increasing patent thicket that raises similar issues concerning patent licensing and research development. This essay reviews several of these challenges that have come to the fore since CRISPR's development in 2012. In particular, the lucre and complications that have followed the CRISPR patent dispute may affect scientific collaboration among academic research institutions. Relatedly, universities' adoption of "surrogate licensors" may also hinder downstream research. At the same time, research scientists and their institutions have also used CRISPR patents to ensure that the technology is used in an "ethical" manner. The review of these discussions concludes with several observations about what the CRISPR patent dispute can teach us, generally, about normative science and patents.

About the editor

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

Contact

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

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

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

For further information about some of our IP-related capabilities:

- **Antitrust and IP**
- **Competition**
- **Energy**
- **Forensics**
- **Intellectual Property**
- **Life Sciences**
- **Transfer Pricing**