



IP Literature Watch

CRA Charles River
Associates

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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

Proportional restraints and the patent system

Erik Hovenkamp (Harvard Law School)

Jorge Lemus (University of Illinois Urbana Champaign)

Working paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3026380

To be mutually-preferred to litigation, patent agreements between rivals often must restrain competition to some degree. Any such agreement forestalls a ruling on the patent's validity (and hence its enforceability), which depends largely on the "innovativeness" of the invention. Ideally, there would be proportionality between (1) the quality of the patent (the probability it is valid) and (2) the extent to which competition is restrained. We show that antitrust can accomplish this by simply policing the manner in which competition is restrained, and by prohibiting certain side-deals that always subvert proportionality. Different restraints vary considerably — and predictably — in the extent to which bargaining possibilities deviate from the firms' litigation expectations (which depend on patent quality). We can thus infer the degree of proportionality from the nature of the agreement, making it unnecessary to estimate competitive effects or patent quality.

Confidentiality in patent dispute resolution: antitrust implications

Mark R. Patterson (Fordham University School of Law)

Washington Law Review, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3026369

Information is critical to the functioning of the patent system. Legal rules encouraging the patent challenges that produce information regarding patent validity and scope are evidence of this importance. In contrast, licensing terms are often subject to confidentiality agreements. On the one hand, this is not surprising: sellers and buyers do not normally publicize the details of their transactions. On the other hand, explicit confidentiality agreements are not common in other markets, and they may be particularly problematic for patents, where a patent's elimination of competition can increase market uncertainty.

Information about licensing terms is particularly important in one of today's most important patent licensing contexts: FRAND licensing. Standard setting organizations that define the technologies used in important products like smartphones typically require their members to commit to license patented technologies that are adopted in standards on fair, reasonable, and nondiscriminatory (FRAND) terms. The nondiscriminatory element of this commitment is difficult for potential licensees to enforce without information about the licensing terms to which other licensees have agreed.

Where confidentiality agreements cause competitive harm, antitrust law may provide a remedy. Several U.S. Supreme Court cases have condemned agreements that suppress information, and those cases could be applied to confidentiality agreements in the patent context. Of course, confidentiality may sometimes be procompetitive, particularly when it involves only private negotiations. In other contexts, however, and notably in arbitration, which is a substitute for open court proceedings, the competitive balance is more problematic. Indeed, U.S. patent law mandates that patent arbitration awards be made public through the Patent and Trademark Office, though this requirement is generally ignored.

This Article describes the importance of patent licensing information and discusses the antitrust implications of confidentiality agreements, particularly in the FRAND context and in arbitration. The Article also offers several ways in which parties, standard setting organizations, and arbitration bodies could seek to avoid the possible anticompetitive effects of confidentiality.

Basic antitrust principles for standard essential patents and patent assertion entities

Yee Wah Chin (Ingram Yuzek Gainen Carroll & Bertolotti, LLP)

Working paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3027806

There have been significant calls recently for findings that infringement suits and licensing conduct by patent assertion entities (PAEs) labeled "patent trolls" and by holders of standard essential patents (SEPs) generally are monopolization or attempts to monopolize that violate Sherman Act §2, 15 U.S.C. §2. This paper argues that the basic principles of keeping in mind history and context, and general antitrust principles, apply equally to SEPs and PAEs as to other economic phenomena.

IP & Licensing

Why the ETSI IPR Policy does not and has never required compulsory 'License to All': a rebuttal to Karl Heinz Rosenbrock

Bertram Huber (University of Tuebingen – Faculty of Law)

Working paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3038447

Bertram Huber is a legal expert who personally participated in elaborating and drafting the Intellectual Property Rights (IPR) Policy adopted by the European Telecommunications Standards Institute (ETSI). In this paper, he explains the history and reasoning for his view that the obligation to license under the ETSI IPR Policy, once a commitment is given to license at fair, reasonable, and nondiscriminatory (FRAND) terms and conditions, does not necessarily extend to chipsets and other electronic components of standards compliant end devices. He further explains why, in his view, the ETSI IPR Policy does not compel an "essential" IPR holder to grant a license to every company that requests one, without consideration of where the license seeking company operates in the chain of production or of whether that license would be duplicative of licenses granted to others. As explained by the author, his views are consistent with, and supported by, ETSI's objectives and intent at the time it adopted its current IPR

Policy, the express Policy language, and the long standing practice of the telecommunications industry. In particular, he highlights how, in adopting its IPR Policy, ETSI intended to safeguard access to the cellular standards without changing the prevailing industry practice of manufacturers of complete end devices concluding licenses to the standard essential patents practiced in those end devices. Huber's views on these issues rebut the positions taken by ETSI's former Director General, Karl Heinz Rosenbrock, in his recent paper titled Why the ETSI IPR Policy Requires Licensing to All.

Reflections on an UNCITRAL project on intellectual property license contracts

Andrea Tosato (University of Nottingham – School of Law)

Working paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3037356

IP licenses are the leading lady of the information age; the strategic and economic significance of this contract archetype have grown exponentially over the past 40 years. This glaring spotlight has exposed the deficiencies that afflict the legal framework regulating these transactions. The applicable norms are scattered throughout diverse areas of the law and as such are difficult to appraise holistically. This results in both legal uncertainty and loss of efficiency. Moreover, comparative analysis of IP licensing regimes across jurisdictions reveals a jarring lack of alignment that severely hinders international transactions. UNCITRAL been contemplating the possibility of a project in this area for over a decade. Though Member States have battled lingering reservations, support has been increasing steadily among practitioner and academics, and is verging on achieving critical mass. This paper provides the necessary theoretical thrust infrastructure for this initiative by expounding its possible scope, content and form. The objective is not to articulate or advocate a single, concrete proposal, but rather to identify the categories of legal issues that Member States would face in the elaboration of this project and lend colour to the types of decision making processes required for attain consensus solutions. On the basis of this analysis, a strategy to advance this project to its next phase is proposed.

SMEs and standard essential patents: licensing efficiently in the internet of things

Haris Tsilikas (Max Planck Institute for Innovation and Competition)

Claudia Tapia (Ericsson)

les Nouvelles - Journal of the Licensing Executives Society, Volume LII No. 4, September 2017

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3009039

Modern knowledge-based economies increasingly rely on standards upon which innovative products are built. Standards allow businesses to benefit from economies of scale, to specialise on what they do best and invest in product differentiation. Standards reduce barriers to trade, create open markets and a level playing field, thus spurring competition and innovation. Consumers also reap substantial benefits from standardisation, in terms of lower prices, wider and interoperable product variety and more innovation. Standards can be arrived at either through unmediated market competition processes as de facto standards, or through industry coordination within standards-development organisations (SDOs.)

IP & Innovation

Innovation and the firm: a new synthesis

Peter Lee (University of California, Davis – School of Law)

Stanford Law Review, Vol. 70 (2018 Forthcoming)

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3028989

Recent scholarship highlights the prevalence of vertical disintegration in high-technology industries, wherein specialized entities along a value chain transfer knowledge-intensive assets between them. Patents play a critical role in this process by lowering the cost of technology transactions between upstream and downstream parties, thus promoting vertical disintegration. This Article, however, challenges this prevailing narrative by arguing that vertical integration pervades patent-intensive fields. In biopharmaceuticals, agricultural biotechnology, information technology, and even university-industry technology transfer, firms are increasingly absorbing upstream and downstream technology providers rather than simply licensing their patents.

This Article explains this counterintuitive development by retheorizing the relationship between innovation and the firm. Synthesizing previously disconnected lines of theory, it first argues that the challenge of aggregating tacit technical knowledge — which patents do not disclose — leads high-tech companies to vertically integrate rather than simply rely on licenses to transfer technology. Relatedly, the desire to obtain not just discrete technological assets but also innovative capacity, in the form of talented engineers and scientists, also motivates vertical integration. Due to the socially embedded nature of tacit knowledge and innovative capacity, firms frequently absorb entire pre-existing organizations and grant them significant autonomy, an underappreciated phenomenon this Article describes as “semi-integration.” Finally, strategic imperatives to achieve rapid scale and scope also lead firms to integrate with other entities rather than simply license their patents. The result, contrary to theory, is a resurgence of vertical integration in patent-intensive fields. The Article concludes by evaluating the costs and benefits of vertically integrated innovative industries, suggesting private and public mechanisms for improving integration and tempering its excesses.

IP & Litigation

Brief amicus curiae of intellectual property professors in support of petition for Certiorari in Samsung v. Apple

Bernard Chao (University of Denver Sturm College of Law)

Working paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3021941

eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 394 (2006) held that that courts should apply the traditional four-factor test when deciding whether to issue a permanent injunction to a prevailing patentee. Certiorari should be granted in this case because the Federal Circuit’s decision dilutes the eBay test by allowing its irreparable harm factor to be satisfied when a patentee merely shows “some connection” between the patented feature and demand for the infringing products. Since the existence of “some connection” does not establish any (let alone, irreparable) harm stemming from the infringement, this Court should instruct the Federal Circuit to require actual proof of causation when applying the irreparable harm factor of the eBay test.

Brief amici curiae of 58 law, economics, and business professors in support of appellants' petition for panel rehearing or rehearing en banc

Michael A. Carrier (Rutgers Law School)

Third Circuit brief in In re Wellbutrin XL Antitrust Litigation, 2017

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3033996

In *re Wellbutrin XL Antitrust Litigation*, a Third Circuit panel, in evaluating a drug patent settlement, required the plaintiffs to show definitively that the brand's patent was invalid or not infringed, which would have allowed the generic to enter the market earlier absent the settlement. This brief offers four critiques of the decision.

First, the decision makes multiple unsupported assumptions: it requires a “dispositive” connection between payment and patent weakness; it carves out special rules—nowhere found in *FTC v. Actavis*—for “complex and multi-faceted” settlements; it accepts risk-based defenses rejected in *Actavis*; and it finds holdings adopted in *Actavis* “effective[ly] rebutt[ed]” by arguments rejected in the case.

Second, the panel decision contradicts the Supreme Court's landmark decision in *Actavis*. In that decision, the Court emphasized antitrust's vital role in evaluating settlements by which brand firms pay generics to delay entering the market. In findings ignored by the panel, the Court treated a large and unjustified payment as a “surrogate” for a patent's weakness and made clear that settling parties could not defend their payment on the grounds that it would avoid the risk of losing the patent case.

Third, the panel decision is not consistent with decisions of the Third Circuit. In *King Drug*, the Third Circuit extended the Supreme Court's rejection of a risk-aversion defense to “no authorized generic” agreements by which brands promise not to introduce their own generics that would compete with “true” generics. And less than two weeks after the decision, the Third Circuit reached a conclusion contrary to the panel in *In re Lipitor Antitrust Litigation*, making clear that a payment's size “may very well correspond with the magnitude” of a “patent holder[s] concern[] about the validity of its patent” and finding that the brand's forgiveness of the generic's damages in a separate case “was ‘large’ enough to permit a plausible inference” that the brand “had serious doubts about the ability of [its] patents to lawfully prevent competition.”

Finally, the panel decision is not consistent with the policies of the relevant regulatory regimes. The Hatch-Waxman Act, Congress's framework balancing competition and innovation in the pharmaceutical industry, promotes generic competition by encouraging challenges to invalid patents. Such challenges also reflect the important policy, found in patent law itself, of challenging patents.

The brief concludes that for all of these pressing reasons, the petition for panel rehearing or rehearing en banc should be granted.

The 'article of manufacture' today

Sarah Burstein (The University of Oklahoma College of Law)

Working paper

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3033231

In *Samsung v. Apple*, the U.S. Supreme Court ruled that the phrase “article of manufacture” in 35 U.S.C. § 289 of the Patent Act can refer either to the infringer's end product or to a component thereof. But the Court refused to formulate a test for what constitutes the relevant “article” in a given case. Some have argued that courts should adopt the multi-factor, case-specific approach proposed by the U.S.

Government in its Samsung amicus brief. However, that approach is based on a flawed legal premise, fails to reflect either the language of the statute or the original intent, and will increase costs and uncertainty in design patent litigation. This Article proposes a new solution. It argues that courts should adopt the historical meaning of the phrase “article of manufacture” in interpreting and applying 35 U.S.C. § 289. It also argues that the determination of which article a particular design is “applied” to should be informed by the original understanding of what constituted a protectable “design.” This Article then proposes a framework for applying these principles to Samsung step one, including an explanation of why this should be treated as an issue of law, not an issue of fact. This approach provides a workable solution that would be easier and cheaper to apply than the other tests that have been proposed. This approach would also minimize the in terrorem value of partial design patents and result in more defensible damages awards that would more accurately reflect the designer’s actual contribution without providing a windfall to most design patentees.

IP Law & Policy

The case for eliminating patent law's inequitable conduct defense

Eric E. Johnson (University of North Dakota School of Law)

Columbia Law Review Online; The Case for Eliminating Patent Law's Inequitable Conduct Defense, 117 Colum. L. Rev. Online 1 (2017)

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3039042

This paper argues for the elimination of the judicially crafted inequitable conduct defense, which will invalidate a patent upon the defendant’s showing that the patent was obtained by deceiving the patent office. Inequitable conduct commonly comes up as an accusation that the patentee, when applying for her or his patent, failed to live up to a duty of disclosure and candor. This duty and the inequitable conduct doctrine’s enforcement of it are meant to help avoid the issuance of undeserved patents, which would unfairly restrict the rights of the public. Unfortunately, in the real world, the inequitable conduct defense can make a mess of things, driving up litigation costs, changing settlement dynamics, perverting patent economics, elevating strategic behavior, and creating a sideshow of mudslinging for the jury. The existence of the inequitable conduct defense also adds costs and complexity to patent prosecution. Patent law’s inequitable conduct defense is a mistake that can be undone. Either Congress or the Supreme Court should seize the opportunity to eliminate the defense entirely.

Part I provides background on patents and traces the evolution of the inequitable conduct defense. Part II explains how the inequitable conduct defense creates waste, during both the patent prosecution process and litigation. Part III reviews attempts by the courts and Congress to rein in the inequitable conduct defense and explains why these attempts have been inadequate. Part IV argues that complete elimination of the inequitable conduct defense is the best course.

Patent infringement as trespass

Adam MacLeod (Faulkner University, Jones School of Law)

Alabama Law Review, Vol. 69, 2018, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3029708

The conventional account of patent law holds that patent infringement is a strict liability offense. That account is incomplete, as infringement law takes intention and even moral culpability into account for various purposes. A clearer picture of patent infringement law emerges when infringement is viewed as a species of trespass. Common law trespass operates differently in the reasoning of different audiences, for patents and other property present different facets to different audiences. Three such facets explain

the three forms of infringement in patent law. Together, those three forms explain all of infringement law as a coherent whole, with one exception: a novel, controversial interpretation of the Supreme Court's decision in *eBay Inc. v. MercExchange L.L.C.*. That interpretation holds that in cases where the owner of an infringed patent requests a permanent injunction, the Court eschews traditional equitable considerations such as willfulness and culpability, and requires lower courts to use a formulaic, four-part test. That interpretation being only one plausible reading of the opinions in the case, inconsistent with the rest of patent infringement law, and not commended by any aspect of trespass law, is wrong. Other aspects of patent infringement are not foreclosed by any facet of trespass law, and are rendered intelligible by one or more facets, and in those areas any reasonable rule chosen by Congress should be treated as law.

Collective invention and patent law individualism, 1877-2012; or, the curious persistence of inventor's moral right

Graham Dutfield (University of Leeds)

Collective Invention and Patent Law Individualism, 1877-2012; or, the Curious Persistence of Inventor's Moral Right. In Arapostathis & Dutfield, Eds, Knowledge Management and Intellectual Property: Concepts, Actors and Practices, 2013

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3030636

Why do inventors continue to be named in patents when most are owned by firms rather than individuals? And what role, if any, does inventor-naming play in the management of intellectual property rights? This chapter seeks answers.

Copyright Law

All for COPYRIGHT stand up and holler! Three cheers for Star Athletica and the U.S. Supreme Court's perceived and imagined separately test

David E. Shipley (University of Georgia School of Law)

Cardozo Arts & Entertainment Law Journal, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3032666

In March 2017 the United States Supreme Court held in *Star Athletica L.L.C. v. Varsity Brands Inc.* that an artistic feature incorporated into the design of a useful article could be protected by copyright when that feature could be perceived as a two- or three-dimensional work of art separate from the useful article, and imagined separately as a protectable pictorial, graphic, or sculptural work. This two-part test replaces a variety of tests which courts and commentators proposed and applied during the last 40 years. The *Star Athletica* decision is predicted to be a boon to the fashion and apparel industry, furniture designers, and manufacturers of other useful consumer products. Depending on how leniently the new test is applied, it could result in an increase in the number of useful articles with artistic features which can be conceptually separated from the article's utilitarian features and protected by copyright.

This article discusses the potential impact of *Star Athletica* and the Court's new two-part test for separability. The first section summarizes how product shape and design are protected under our intellectual property laws, explains the preference for copyright, and sets forth federal policy allowing the public to copy products that our patent and copyright laws leave in the public domain. It next provides an overview of how copyright protection for artistic features incorporated in useful articles evolved between the Supreme Court's 1954 decision in *Mazer v. Stein* and *Star Athletica* in 2017. After summarizing the majority, concurring, and dissenting opinions in *Star Athletica*, the article applies the new test in several difficult pre-*Star Athletica* cases in order to assess the decision's practical impact on a variety of useful articles.

This survey of the new test's application to pre-Star Athletica cases leads to the following conclusions and contentions. Although the Supreme Court's new test brings uniformity and should be relatively easy to apply in connection with pictorial and graphic works applied on useful articles, the application of the new test to sculptural features incorporated into useful articles will remain challenging for counsel and courts. Infringement claims over useful articles that are similar to those at issue in the tough cases from the pre-Star Athletica era remain difficult. Even though the overall shape of a useful article like a chair, toaster, food processor, car or bike rack can be expressed by an industrial designer in different ways, there should be no copyright protection for any of these articles unless they have a separable feature. The nation's legislative policy against protection for industrial design should bar copyright when an article's aesthetic elements are inextricably interwoven with its utilitarian aspects. The risk of applying the Supreme Court's new test too leniently is the grant of copyright protection to an article's overall shape, and this extends the copyright monopoly to a useful article's functional or utilitarian features. Extending copyright protection in this way could result in outcomes which would be contrary to Congress's steadfast refusal since 1914 to enact a general industrial design protection statute as well the Supreme Court's statements about importance of the competitive mandate and the public's right to copy that which our copyright and patent laws leave in the public domain.

Star Athletica's fissure in the intellectual property functionality landscape

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Daniel Yablon (University of California, Berkeley, School of Law, Students)

Special Online Symposium Issue, 166 University of Pennsylvania Law Review Online, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3036254

This article comments on the Supreme Court's 2017 *Star Athletica v. Varsity Brands* decision addressing copyright's useful article doctrine. It shows that the majority's analysis mistakenly lends credence to the notion that copyright protection can extend to functional elements of useful articles so long as pictorial, graphic, or sculptural features can be fixed in some other tangible medium. Of perhaps greater concern, Justice Breyer's dissenting opinion confuses the intellectual property landscape by suggesting, erroneously, that design patents can protect functional features of articles of manufacture. The article advises lower courts to disregard the unsubstantiated dicta in *Star Athletica* and instead look to statutory requirements and limitations, legislative guidance, and the foundational principles undergirding the intellectual property system so as to avoid creating "mutant species" of intellectual property: protection for functional features of useful articles outside the auspices of the utility patent system.

Lillian McMurry and the blues contracts of Trumpet Records

Antonia Eliason (University of Mississippi School of Law)

Mississippi Law Journal, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3035543

Trumpet Records was a Jackson, Mississippi-based record label established and run by Lillian McMurry from 1950 until it folded in 1955. This article draws on archival material to evaluate the progression of the contracts entered into by Trumpet Records with its blues artists, arguing that this demonstrates the evolving contractual understanding of a young record label, showing increasing sophistication and an awareness of some of the potential pitfalls of signing artists. The contracts of Trumpet Records, when taken together with the correspondence of the label's head with her artists, also show a commitment to fairness and a level of scrupulousness and honesty not often seen in the industry. The article also examines the legal dispute between Sherman Johnson and Trumpet Records, which reached the Mississippi Supreme Court. The article further turns to the subsequent copyright infringement of a number of Trumpet Record recordings by European record labels in the 1970s, which sheds light on the widespread practice of piracy prevalent in relation to older blues recordings.

IP & Trade

Back to the future: the Digital Millennium Copyright Act and the Trans-Pacific Partnership

Matthew Rimmer (Queensland University of Technology (QUT))

Laws, Vol. 6(3), 11, 2017; DOI:10.3390/laws6030011

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3024422

The Trans-Pacific Partnership (TPP) is a trade agreement, which seeks to regulate copyright law, intermediary liability, and technological protection measures. The United States Government under President Barack Obama sought to export key features of the Digital Millennium Copyright Act 1998 (US) (DMCA). Drawing upon the work of Joseph Stiglitz, this paper expresses concerns that the TPP would entrench DMCA measures into the laws of a dozen Pacific Rim countries. This study examines four key jurisdictions — the United States, Canada, Australia, and New Zealand — participating in the TPP. This paper has three main parts. Part 2 focuses upon the takedown-and-notice scheme, safe harbours, and intermediary liability under the TPP. Elements of the safe harbours regime in the DMCA have been embedded into the international agreement. Part 3 examines technological protection measures — especially in light of a constitutional challenge to the DMCA. Part 4 looks briefly at electronic rights management. This paper concludes that the model of the DMCA is unsuitable for a template for copyright protection in the Pacific Rim in international trade agreements. It contends that our future copyright laws need to be responsive to new technological developments in the digital age — such as Big Data, cloud computing, search engines, and social media. There is also a need to resolve the complex interactions between intellectual property, electronic commerce, and investor-state dispute settlement in trade agreements.

TPP, RCEP and the crossvergence of Asian intellectual property standards

Peter K. Yu (Texas A&M University School of Law)

Governing Science and Technology in the Mega-Regionals: Regulatory Divergence and Convergence, Peng Shin-yi, Li Han-wei and Li Ching-fu, eds., Edward Elgar Publishing, 2018, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3032941

The debate on convergence and divergence has garnered considerable attention from policymakers and commentators involved in regulatory developments in Asia. The recent completion of the negotiations on the Trans-Pacific Partnership (TPP) and the still ongoing negotiations on the Regional Comprehensive Economic Partnership (RCEP) have added fuel to this debate. Given the different leadership in these two mega-regional agreements and the exclusion of many RCEP parties from the TPP negotiations, it will be interesting to see how the agreements will affect the future efforts to set regional intellectual property standards. It will also be curious to see whether the draft and finalized standards could reveal policy preferences of the participating countries.

This chapter begins by examining the regulatory convergence narrative, focusing on efforts to harmonize Asian intellectual property standards through the WTO TRIPS Agreement and TRIPS-plus bilateral, regional and plurilateral agreements. The chapter then turns to the regulatory divergence narrative, discussing the region's inherent nation-based differences, the development considerations involved in developing Asian intellectual property laws and policies, and the growing rivalry between the TPP and the RCEP. This chapter concludes by suggesting that neither the convergence narrative nor the divergence narrative presents a complete and satisfactory story for a region as large, complex and diverse as Asia. Instead, the chapter contends that the region is likely to see "regulatory crossvergence," which features a simultaneous convergence and divergence of regulatory standards. Such crossvergence not only has resulted in the region's development of compromising standards but has also been highly indicative of the ongoing and future standard-setting efforts in Asia.

Other IP Topics

Patent protection for microbial technologies

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FEMS Microbiology Letters, Vol. 364, Forthcoming

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3041221

Microbial technologies often serve as the basis of fundamental research tools in molecular biology. These presents challenges, as well as ethical, legal and social issues, concerning their patenting. This commentary presents several case studies of these issues across three major microbiological tools: CRISPR, viral vectors, and antimicrobial resistance drugs. It concludes that the development of these technologies—both scientifically and commercially—depend, in part, on the patent regime available for each.

Cyber deniability: emerging evil axis sows geopolitical seeds of sabotage as allies consider 21st century tactics and possible retribution

N. MacDonnell Ulsch (Charles River Associates)

Homeland Security Today May/June 2017, Vol. 14, No. 3, p. 32-37

http://www.cyberindia.org/research/CYBER_DENIABILITY.pdf

Undeniably, the People's Republic of China maintains a strong and effective- and often undiscovered – stealthy offensive cyber attack capability. This technologically sophisticated weaponry has been used extensively to steal US company competitive information and then deliver that competitive information to China's state-owned and subsidized businesses. These business then compete on unequal footing with US companies. To some extent, this is old news, though the level of awareness by the Us industrial sector seems appalling low. This, however, is starting to change.

Boards of directors are starting to ask many of the right questions about the nation-state cyber threat of economic espionage, but many such boards are coming to the table very late into the threat cycle. But what if cyber economic espionage is no longer enough? What if the global economy is not turning fast enough in favor of our economic competitors? What if the next evolutionary step is not cyber espionage but cyber sabotage? Instead of stealing a company's intellectual property and trade secrets and competing unfairly, cyber sabotage would be a destructive cyber attack resulting in the compromised physical integrity of facility and even the potential for loss of life.

This is not science fiction; it's fact. It has already happened. It may be argued reasonably that denial of service attacks on victim company websites are the predecessors to a full-scale cyber sabotage attack. In reality, cyber sabotage attack occur with great frequency.

About the editor

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