



# IP Literature Watch

**CRA** Charles River  
Associates

December 2014

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

### **How not to apply Actavis**

Michael A. Carrier (Rutgers University School of Law – Camden)

*Northwestern University Law Review Online*, Vol. 109, 2014

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2524633](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2524633)

One of the most pressing issues in patent and antitrust law involves agreements by which brand-name drug companies pay generic firms to delay entering the market. In *FTC v. Actavis, Inc.*, the Supreme Court held that these settlements could violate the antitrust laws. And while the Court introduced a blueprint for analyzing the agreements, it anticipated that the lower courts would play a crucial role in elaborating the framework.

Along these lines, two recent district court decisions portend ominous difficulties for this area. In fact, if the rulings in *In re Lamictal Direct Purchaser Antitrust Litigation* and *In re Loestrin 24 FE Antitrust Litigation* are affirmed and adopted by other courts, plaintiffs will face nearly insurmountable hurdles, rendering the landmark Actavis decision nothing more than a dead letter. This Essay shows that the Lamictal and Loestrin courts erred in (1) applying a framework never anticipated in Actavis, (2) ignoring crucial holdings from Actavis, and (3) amassing unjustified powers for themselves.

In blocking affordable generic prescription drugs, “exclusion payment” settlements cost consumers billions of dollars and have profound consequences for public health. But if the trend unleashed by the Lamictal and Loestrin cases is not quickly reversed, courts will be relegated to the role of traffic cops waving anticompetitive settlements through flashing green lights of judicial “scrutiny.”

### **Antitrust and information technologies**

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

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2531689](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2531689)

Technological change strongly affects the use of information to facilitate anticompetitive practices. The effects result mainly from digitization and the many products and processes that it enables. These technologies of information also account for a significant portion of the difficulties that antitrust law

encounters when it addresses intellectual property rights. In addition, changes in the technologies of information affect the structures of certain products, in the process either increasing or decreasing the potential for competitive harm.

For example, digital technology affects the way firms exercise market power, but it also imposes serious measurement difficulties. The digital revolution has occurred in stages. The most recent is "complete" digital distribution, where all of the content being shipped to the consumer is digital. Prior to that, although continuing to this day, music and some books and other media are distributed in formats such as digital compact disc (CD) or digital video disc (DVD). Although most of the direct user content in such formats is digital, it is still placed on a physical object, which is then packaged and distributed to consumers through traditional channels, including brick-and-mortar retailers and the mails. By contrast, complete digital distribution refers to markets such as downloaded songs and downloaded or streamed video content, including movies, games, and software, as well as electronic books. The entire consumer "package" is distributed purely electronically. Complete product digitization changes the size or shape of the markets in which firms operate, in the process affecting their opportunities to exercise market power.

In purely digital markets intellectual property rights are crucial to the ability to exercise significant market power. Once a book such as *Moby Dick* enters the public domain it can be very cheaply copied and digitization reduces marginal costs to practically nothing. As a result even explicit price fixing is unable to maintain prices above cost for extended periods. If an anticompetitive restraint occurs in purely digital markets it is almost never in the product itself, but rather in the infrastructure necessary for distribution. One feature of antitrust litigation in purely digital markets is that the "product" consumers want is frequently only the tail, while the delivery device is the dog. For example, the major bottlenecks in the eBook and eMusic industries have not been the books or songs themselves, which are rarely capable of being monopolized, but rather technological constraints on reading or listening devices and the software formats that they run.

Another important characteristic of purely digital markets is high fixed costs but marginal costs that are very close to zero. So if digital media are sold in competition with one another then why is the price not zero or something very close? That answer has to do with the twin effects of intellectual property protection -- namely, per use royalties and product differentiation. A per use royalty is a variable cost that the seller incurs each time it sells a unit. As a result it is part of marginal cost. For example, if the author of an ebook is entitled to one dollar on each copy sold, then the price must be at least one dollar. By contrast, lump sum royalties, which are a single royalty on a product over its entire commercial life irrespective of output, do not show up in marginal costs.

Intellectual property rights also create product differentiation, which considerably blunts the impact of competition. Books that are still under copyright cannot be precise copies of one another. The second of two identical books would infringe the copyright on the first. To the extent they differ, however, customers have preferences for one over another and this permits prices at above cost even though the market has multiple competitors. Entry into the public domain leads to product homogeneity under competition, often driving the price of purely digital products to zero.

There is little reason for thinking that competition cannot work in most digital markets, including most that are purely digital. The trick is keeping the channels open for new entry, movement, and consumer choice.

## IP & Standardization

### **Divergent patterns of engagement in internet standardization: Japan, Korea and China**

Jorge L. Contreras (University of Utah – S.J. Quinney College of Law)

*38 Telecommunications Policy 916–934, November 2014*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2523628](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2523628)

This article analyzes the engagement of Japanese, Korean and Chinese participants in the development of Internet standards at IETF on the basis of four quantitative metrics: attendance, patenting, authorship and leadership. The results are strikingly divergent. Japanese involvement in Internet standardization began early and Japan was, for many years, second only to the U.S. in terms of IETF participation. Though Japanese participation has declined since the early 2000s, Japan remains a major contributor to IETF standardization. Korean involvement in IETF has always been significant, but below the levels of Japan and major European countries. Korean participation in IETF has also declined over the past decade, and has been dominated by one firm, Samsung. Though meaningful Chinese involvement in IETF did not begin until the mid-2000s, it has rapidly expanded in recent years. Today, China is a major player in numerous areas of Internet standardization in terms of three metrics (participation, patenting and leadership), and is rapidly gaining in terms of document authorship as well. Most of China's recent IETF involvement can be attributed to Huawei, though other Chinese firms have recently begun to increase their participation in the organization. Thus, contrary to some views that China's engagement with standardization is primarily one of indigenous innovation and "catching up", China's experience with IETF demonstrates deliberate and effective engagement with a major Western standards-development organization on its own terms.

## IP & Innovation

### **Stock prices, investor short-termism, and innovation**

Huong T. T. Le (Louisiana State University)

Ji-Chai Lin (Louisiana State University)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2527994](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2527994)

Firms can change their outstanding shares to manage their stock price levels. Those with lower stock prices tend to attract more speculative trading, which causes higher price volatility and may force their managers to excessively focus on short-term earnings at the expense of R&D and other long-term projects. Thus, we hypothesize that firms investing more in R&D prefer to set higher stock prices to mitigate investor short-termism and foster innovation. Indeed, we find that firms with more R&D capital tend to keep higher stock prices and are less likely to split their stocks to lower prices. Furthermore, high-priced firms are less likely to cut R&D to reverse an earnings decline, and less likely to fire their CEOs in the presence of poor earnings. More importantly, firms' R&D productivity — in terms of generating patents and patent citations — tends to increase with their stock prices, even after controlling for firm valuation, stock returns, stock liquidity, and institutional ownership. For robustness checks, we examine stock splits, which allow managers to re-set their stock price levels, and IPOs in which managers set an offering price range before shares are publicly traded. Consistent with our hypothesis, we find that IPO firms setting higher offering prices have more future innovation and that innovation declines after firms split their stocks. Thus, our results imply that managers of R&D firms actively set high stock prices to foster innovation, and support Warren Buffett's wisdom that firms can use stock prices to attract preferred clientele.

## **Sequential innovation and patent policy**

Alvaro Parra (University of British Columbia)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2527671](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2527671)

I study how patent policy shapes R&D investments in the context of sequential innovation. Investments are driven by the incremental rent that firms obtain from innovating, and increase as the patent expiration date approaches. In equilibrium, patent policy affects both the value of a new innovation and the cost of replacing currently active patents. As a result, strong patent protection can delay investments, reducing the economy's speed of innovation. The welfare cost of a protective policy, therefore, lies beyond the distortions predicted by traditional models.

## **International patenting strategies with heterogeneous firms**

Nikolas Jason Zolas (U.S. Census Bureau – Center for Economic Studies)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2523438](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2523438)

This paper analyzes how firms decide where to patent in a heterogeneous firm model of trade with endogenous rival entry. In the model, innovating firms compete with rival firms on price, where rivals force the innovating firm to reduce markups and lower the innovating firm's probability of obtaining monopolistic profits. Patenting allows the innovating firm to reduce the number of rival firms by increasing their fixed overhead costs, thereby providing higher expected profits and increased markups from reduced competition. Countries with higher states of technology, more competition and better patent protection have a greater proportion of entrants who patent. Industries tend to follow a U-shaped pattern of patenting where industries with high heterogeneity in production and low substitution, along with industries with low heterogeneity in production and high substitution patent more frequently. Using a generalized framework of the model, I estimate market-based measures of country-level patent protection, which when compared with other IP indices, suggests that not enough international patenting is taking place. Finally, I test the predictions of the model using a newly available technology-to-industry concordance on bilateral patent flows and show that firms are increasingly sensitive to foreign IP protection. Countries that choose to maximize their IP protection can increase the number of foreign patents by almost 10%.

## **Impact of employment agglomeration on patented innovation in U.S. manufacturing industries from 1986 to 2008**

Abdullah M. Khan (Claflin University School of Business)

*International Journal of Business and Social Research, Issue 4, Volume 10, 2014*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2522776](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2522776)

This paper examines impact of employment agglomeration in fifteen U.S. manufacturing industries on their innovation activities measured by patent count. A count data model is employed in regressing patent count on employment agglomeration measures, measure of scale, and some control variables. Measures of employment agglomeration and market concentration are found to have negative impacts on innovation in U.S. manufacturing industries. Two agglomeration proxies - Gini index and Ellison-Glaeser index have a negative influence on U.S. patented innovation for the study period. This result implies that the external benefit of spatial agglomeration of similar firms has waned down. The impact of market concentration is also found to be a negative factor for innovation. This result implies that firms with larger plant size are less innovative than those with smaller plant size. Impact of 'share of workers with post graduate degrees' on innovation was found to be a positive but statistically not significant factor for innovation. The 'goods pooling' determinant displayed negative influence on innovation. These results are mostly consistent across fifteen manufacturing sub-sectors. Rising energy cost is found to be one of the most significant deterrents of innovation whereas, ethnic diversity is found to be a significant facilitator

of it. Results of this research lend support in favor of regional economic development policies that promote co-agglomeration of various interdependent and complementary industries and small scale industries, and supports ethnic diversity to spur innovation in U.S. manufacturing industries.

## IP & Litigation

### **A new framework for determining reasonable royalties in patent litigation**

Norman Siebrasse (University of New Brunswick – Fredericton – Faculty of Law)

Thomas F. Cotter (University of Minnesota Law School)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2528616](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2528616)

Conventional analysis often assumes that there are only two theoretical options for calculating a reasonable royalty in patent disputes: a “pure ex ante” approach, under which a court reconstructs the hypothetical bargain the parties would have struck prior to infringement, based on the information available to them at that time; and a “pure ex post” approach, under which the court considers the bargain the parties might have reached as of some later date such as the date of judgment. The first approach avoids patent holdup — basing the royalty partly on the infringer’s ex post switching costs — but cannot easily explain other longstanding features of how royalties are calculated, and can lead to awards that reflect the parties’ erroneous ex ante expectations. By contrast, the pure ex post approach uses more accurate information about the invention’s actual value, but it also enables the patentee to capture some of the patent’s ex post holdup value. In this Article, we show that a “contingent ex ante” framework, under which the court reconstructs the bargain the parties would have reached ex ante, based on all relevant information that is available ex post, is superior to both of the conventional approaches. More specifically, our framework enables courts to base the royalty on the most accurate information available of patent value while avoiding the holdup risk arising from the pure ex post approach. We analyze how courts can apply our approach in various settings, including cases involving SEPs, sequential infringement, regulatory uncertainty, and unexpected exogenous events.

### **A century of patent litigation in perspective**

Ron D. Katznelson (Bi-Level Technologies)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2503140](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2503140)

When comparing patent litigation rates or their “rarity” across decades, one must take into account the proportion to the actual scale of commercial activities that give rise to patent disputes. Such normalizing scales are preferably national metrics of commercial activity such as (a) the number of patents issued in the year, (b) the total number of patents in force over which disputes may arise, (c) the total number of Federal civil suits, or (d) the economic scale of the Gross National Product (GDP) in real dollars. This paper marshals for the first time information on all patent litigation in Federal district courts spanning almost a century. The patent lawsuit filing information is newly obtained from the Judicial Conference Annual Reports going back to 1937 and further collected from the weekly Official Gazette of the Patent Office going back to 1923. In addition, an estimate for the number of US patents in force in each of the years covered is derived. Using non-parametric statistical tests, it is shown that, with the exception of the AIA-caused litigation anomaly of 2011-2013 explained in the paper, for all four normalizing metrics, patent litigation intensities during this century had not exceeded those experienced during the 20th century. High patent litigation intensities in the 1920s-1930s and the 1960s have been comparable to, if not higher than, those in the 2000s. These litigation activities are thought to be consistent with major shifts in technological developments such as the development of radio and electronics and chemical advances in the 1920s-1930s, the development of semiconductor transistor electronics in the 1960s and the wireless communications and internet-based technologies at the turn of the 20th century.

## **Does the presumption of validity matter? An experimental assessment**

Jeremy W. Bock (University of Memphis – Cecil C. Humphreys School of Law)

*University of Richmond Law Review, Forthcoming*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2521211](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2521211)

Few doctrines in patent law are perceived to be as important as the presumption of validity. Despite its perceived importance, the impact of informing the jury of the presumption has not been examined empirically, but rather has remained the province of assumptions and speculation.

Because the presumption is, at bottom, a procedural device that assigns the burden of proof, the Federal Circuit has held that it need not be included in the jury instructions so long as the jury is informed of the clear and convincing standard for proving invalidity. Underlying this holding is the assumption that the presence or absence of the presumption instruction would not materially affect the jury's decision-making on invalidity issues. But litigants often view the presumption not simply as a procedural device, but also as a mechanism for influencing the jury with potentially outcome-determinative effects. This mismatch in perception between the Federal Circuit and litigants regarding the impact of the presumption instruction has gone largely unnoticed and unexamined.

This Article reports the first experimental study on the impact of instructing the jury on the presumption of validity. The data reveal statistically significant differences in the rate of invalidation depending on whether the mock jurors were informed of the presumption. Based on this finding, the Article analyzes the selection of a validity baseline in light of both procedural considerations and error costs.

## **IP Law & Policy**

### **Anticipating the storm: predicting and preventing global technology conflicts**

Sabrina Safrin (Rutgers Law School)

*44 Arizona State Law Journal 899, 2014*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2528175](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2528175)

This article helps lay the foundation for a new field of international law — International Law and Technology — and opens novel avenues of inquiry in law and technology and intellectual property more broadly. It analyzes as a starting point why some technologies generate global conflicts while others do not. Technologies that face international resistance can trigger a barrage of international legal responses, ranging from trade bans and WTO disputes to international regulatory regimes and barriers to patenting. Agricultural biotechnology triggered all of these legal flashpoints, while the cellphone, a technology that grew up alongside it, triggered none. Why?

Understanding when a new technology will provoke an international legal firestorm is important to policymakers, business leaders, and lawyers. International controls on a new technology constrain state sovereignty and may impede or catalyze the development of an emerging technology. Technologies likely to generate international controversy bode poorly for regulatory harmonization regimes as contemplated by the new transatlantic trade talks. At a minimum, they require sensitive handling.

This article offers a framework of core geopolitical factors that can help predict the international acceptability of an emerging technology and its likelihood of triggering a plethora of international legal issues. The framework can help decision-makers avoid global technology conflicts and better manage these conflicts once they arise. The first factor is whether the technology is “a big- or a small-tent technology” from a global perspective, as reflected (1) in the innovative space, (2) in the marketplace, and (3) in the sphere of benefit sharing. To illustrate the analysis, the article presents original empirical patent

data for the cellphone and agricultural biotechnology over three decades. This comparison highlights the importance of global innovative activity to international technology comity. The second core predictive factor is whether a new technology embodies nations' fears of the future, as did agricultural biotechnology, or reflects their dreams, as did the cellphone. The first factor is utilitarian; the second is emotional.

### **Protecting consumers through patent protection: the implications of merger**

Shantanu Banerjee (Lancaster University)

Arijit Mukherjee (University of Nottingham)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2533545](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2533545)

We challenge the common wisdom that patent protection (compared to no or weak patent protection) makes the consumers worse off by reducing product-market competition unless it increases innovation significantly. We show that the absence of patent protection may encourage horizontal merger and affect the consumers adversely by increasing product-market concentration compared to the situation with patent protection. Hence, even if we ignore the innovation inducing role of patent protection, the positive impact of patent protection on the consumers through its effect on the product-market competition provides a new rationale for patent protection, which has been overlooked in the literature.

### **Trade treaties and patent policy: searching for a balanced approach**

Hazel V. J. Moir (Australian National University)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2529296](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2529296)

Patents were originally designed to encourage technological innovation, which would not otherwise occur, and which create spillover benefits. Careful design is needed to ensure patents do not provide windfall benefits to inventions which would take place absent patents. Further, for the grant of a patent to be economically rational the patented invention must have a reasonable probability of providing spillover (dynamic growth) benefits that exceed monopoly (static inefficiency) losses. This paper draws on the substantial empirical research on industrial innovation and how patent systems work in practice to develop a first-best set of policy parameters for a balanced (parsimonious) patent system. That is, it attempts to design a set of parameters which maximise dynamic growth benefits while minimising static efficiency losses, thus complying with TRIPS Article 7. These parameters are compared with TRIPS and with the TRIPS-Plus elements which the USA is seeking from bi-lateral and regional trade treaties. The resulting schema allows a clearer view of the cost of patent policy provisions in "trade" treaties.

## **Copyright Law**

### **Father(s?) of rock & roll: why the Johnnie Johnson v. Chuck Berry songwriting suit should change the way copyright law determines joint authorship**

Timothy John McFarlin (Washington University in Saint Louis)

*Vanderbilt Journal of Entertainment & Technology Law, Forthcoming*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2530741](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2530741)

Father(s?) of Rock & Roll utilizes a unique and historic resource — the previously unseen deposition testimony of Chuck Berry and his piano man Johnnie Johnson — to analyze the problems with how copyright law currently determines joint authorship and to propose a new "Berry-Johnson" joint authorship test. We accept as fact that Berry, the self-reliant founding father of rock & roll, wrote his music by himself. However, in 2000, Johnson, who originally hired Berry and who played piano on nearly all the significant songs in the Berry canon, classics such as "Roll Over Beethoven," "Rock & Roll Music,"

“School Day,” “Sweet Little Sixteen,” and “Back in the U.S.A.,” sued Berry, claiming he co-wrote the music to these songs. Both Berry and Johnson testified extensively in the suit about the songs’ creation. Their testimony has been unavailable for study, until now. Granted access to the case file, I quote and analyze key portions of Berry’s and Johnson’s deposition testimony, using it as a case study of high-level collaborative creativity and exploring what it can teach us about how best to determine joint authorship under U.S. copyright law.

Johnson v. Berry exposes the faults in the prevailing judicial joint authorship tests, which misplace their focus on whether collaborators: (1) considered themselves authors, (2) contributed independently copyrightable expression, (3) controlled the creative work, and (4) contributed expression that has audience appeal. Father(s?) of Rock & Roll proposes a new approach, the “Berry-Johnson” test, centered on the creation of the work itself. This test, at its core, asks: did more than one person intend to create a single work and did they each substantially contribute to its essence? If so, these persons are its joint authors. To guide this determination, the test uses (1) the relative impact of each contribution on the work, (2) the views each contributor had regarding the substantiality of the others’ contributions, and (3) industry custom.

The Berry-Johnson test thereby better recognizes worthy joint authors while setting a bar high enough that courts will not explode with joint authorship litigation. Courts should adopt the Berry-Johnson test to resolve joint authorship disputes. Better yet, Congress should expressly codify it in the Copyright Act, along with a provision creating a compulsory license for authors’ use of their non-author collaborators’ independently copyrightable contributions, closing a worrisome loophole in the law highlighted by the recent Garcia v. Google case.

In this way the testimony of Chuck Berry and Johnnie Johnson should change copyright law and improve how we determine joint authorship in future collaborations.

## Other IP Topics

### **The economics and sociality of sharing intellectual property**

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

*Boston University Law Review*, Vol. 94, No. 6, 2014

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2533771](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2533771)

Intellectual property law assumes that people need monetary incentives to create; to this end, it enables the formation of markets for intellectual works. Remarkably, however, sharing — i.e., socially mediated gifting without any expectation of payment — may work much better than markets for distributing the bulk of intellectual property. This Article explains why. While markets work by using money as the medium of exchange, money is actually a poor incentive for creative labors. Emerging research shows that payment in the currency of gratitude and social validation is a far more effective form of encouragement, and it is something sharing is exquisitely adapted to provide. In addition, sharing can offer a surprising efficiency advantage over markets by lowering net transaction costs.

Despite its virtues, sharing of intellectual property rights has received scant attention in the literature. Thus, this Article provides a comprehensive account of intellectual property sharing, explaining what motivates people to share, how sharing compares to markets, what barriers may inhibit sharing, and how to overcome those barriers.

The analysis provided here yields a variety of insights about the functioning of real-world transactional systems that deal in intellectual property entitlements. For example, the contemporary stock photography

market appears to thrive despite the fact that most photographers receive only negligible remuneration. This Article resolves the paradox by showing that this “market” is better characterized as a dysfunctional sharing scheme — one that could be made more efficient by being transformed into an explicitly social, non-monetary enterprise. In addition, this Article examines Creative Commons, a nonprofit program that offers a suite of formal, standardized licenses to surrender selected copyright entitlements. This Article uncovers how the design of Creative Commons is not aligned with people’s natural motivations to share, but how, with some modification, it could be. Finally, this Article puts forward a different model for the distribution of rights to intellectual works: informal person-to-person sharing, which has great potential to build our society’s creative wealth.

## **Seeds, patents and power: the shifting foundation of our food system**

James Matson (Independent)

Minli Tang (The City Law School of City University London)

Sarah Wynn (Independent)

*Working Paper*

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2525120](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2525120)

Our food supply rests on a foundation of agricultural seed. As the world races to meet soaring food demand, the development and control of this fundamental genetic resource will be of critical concern to the entire human community. Seed, once treated as a shared public good and natural resource, is now subject to strict patent control. Patents have encouraged investment and research, but have also facilitated concentrated private ownership. A highly concentrated seed industry already controls much of the U.S agricultural seed resource.

This paper examines the history, legal context, structure and practices of the U.S. corn and soybean seed industry, which may become the model for other crop sectors and world markets. It analyzes the relationship between seed patent law and antitrust law, and considers the antitrust policy challenges posed by the new seed industry. It calls for systematic study and monitoring of the seed industry, and offers some starting points and an analytical framework. This paper also poses some basic questions about the long-term future of agricultural seed.

### **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](mailto:alayne-farrar@crai.com)

[www.crai.com/antitrust](http://www.crai.com/antitrust)

[www.crai.com/ip](http://www.crai.com/ip)

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.



The publications included herein were identified based upon a search of publicly available material related to intellectual property. Inclusion or exclusion of any publication should not be viewed as an endorsement or rejection of its content, authors, or affiliated institutions. The views expressed herein are the views and opinions of the authors and do not reflect or represent the views of Charles River Associates or any of the organizations with which the authors are affiliated. Any opinion expressed herein shall not amount to any form of guarantee that the authors or Charles River Associates has determined or predicted future events or circumstances, and no such reliance may be inferred or implied. The authors and Charles River Associates accept no duty of care or liability of any kind whatsoever to any party, and no responsibility for damages, if any, suffered by any party as a result of decisions made, or not made, or actions taken, or not taken, based on this paper. If you have questions or require further information regarding this issue of *IP Literature Watch*, please contact the contributor or editor at Charles River Associates. This material may be considered advertising. Detailed information about Charles River Associates, a registered trade name of CRA International, Inc., is available at [www.crai.com](http://www.crai.com).

Copyright 2014 Charles River Associates