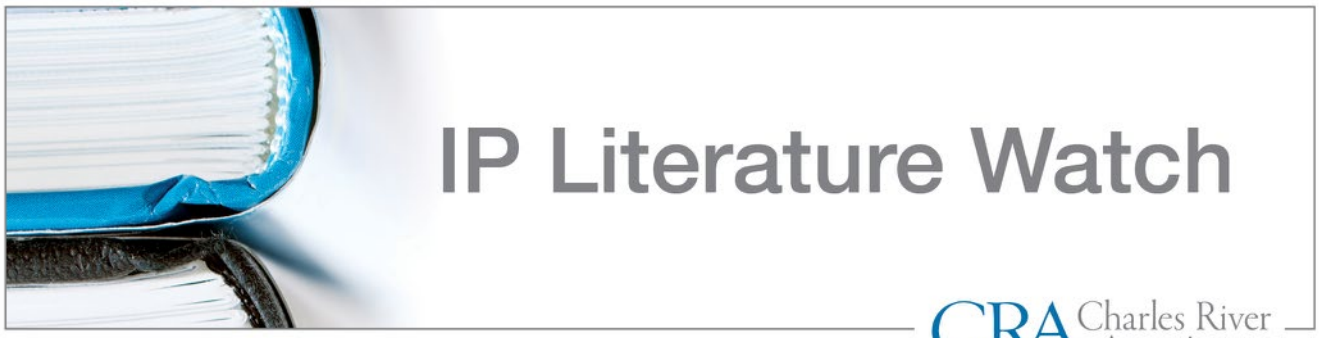

September 2021

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

Licensing Negotiation Groups for SEPs - Collusive Technology Buyers Arrangements: Pitfalls and Reasonable Alternatives

Igor Nikolic (European University Institute)
les Nouvelles forthcoming
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3926650

One of the experts within the European Commission's Standard Essential Patents (SEPs) Expert Group proposed the formation of licensing negotiations groups (LNGs) by implementers to collectively negotiate with SEP owners and patent pools. Accordingly, LNGs could be used for a more efficient SEP licensing, particularly relevant in the Internet of Things with increasingly new stakeholders entering the market. This article examines how LNGs could work in practice and raises concerns about LNGs turning into hidden buyers' cartels creating an industry wide collective holdout. As a less restrictive alternative, this article explains how existing patent pools and other similar licensing platforms that aggregate complementary SEPs and provide one-stop shop for licensing already enable the efficiency and transaction costs savings in the IoT with no harmful anti-competitive effects. By gathering inputs from individual implementers before the formation of royalty programs, some licensing platforms can ensure that implementers are consulted and participate in royalty formulations without the risk of collusive outcomes.

In Defense of 5G: National Security and Patent Rights Under the Public Interest Factors

Kenny Mok (University of Chicago Law School)
University of Chicago Law Review, Forthcoming December 2021 (Volume 88, Issue 8)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3899447

Section 337 of the Tariff Act of 1930 authorizes the International Trade Commission (ITC) to stop—or "exclude"—patent-infringing imports. Exclusion orders protect the country against unfair trade practices and enforce U.S. patent rights. But before issuing an order, § 337 mandates the Commission to consider the order's harm to the public health and welfare, competitive conditions, availability of substitutes, and consumers. Because it rarely finds that these "public interest factors" outweigh the benefits of patent enforcement, the Commission has mostly granted exclusion orders despite growing concerns related to the public's reliance on imported mobile technology.

5G, or the next generation of mobile technology, promises to connect our homes, cars, and hospitals to digital networks across the country. With great promise comes great risk. Growing hacking threats from foreign adversaries like China and Russia, coupled with the concentrated nature of 5G innovation, raise urgent cybersecurity concerns. From 2017 to 2019, two ITC administrative law judges in Apple Qualcomm investigations disagreed over whether 5G concerns justified the denial of an exclusion order. This Comment argues that the ITC may lawfully interpret § 337 to consider 5G national security risks under the public interest factors and proposes a cybersecurity framework to assess the policy weight of these risks. These analyses will guide businesses and ITC officials through the next generation of patent disputes.

IP & Licensing

Co-opetition and the Firm's Information Environment

Brian J. Bushee (University of Pennsylvania - The Wharton School)
Thomas Keusch (INSEAD)
Jessica Kim-Gina (University of California, Los Angeles (UCLA) - Accounting Area)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3925687

Some firms in the technology sector choose to cooperate with competitors ("co-opetition") in Standard Setting Organizations (SSOs). These SSOs create technology standards that facilitate rapid market penetration of new technologies such as Wi-Fi, Bluetooth, and 4G. Active participation in the standard setting process requires the exchange of proprietary information with competitors. While the goal of such information sharing is to further a technology or a market, firms potentially receive an unintended benefit from access to competitor and industry information. We examine whether active SSO participation enhances a firm's information set and allows managers to better predict future sales. Conducting within-firm analyses, we find that the centrality of a firm's location within the network of SSO collaborators is positively related to the accuracy of the firm's sales forecasts. This relation is stronger when firms share more information with direct competitors, when forecasting is more difficult ex ante, and when firms forecast over longer horizons. Our findings show that collaborating with competitors in the product market provides an important unintended benefit of improving the manager's information set.

Emergence of Intellectual Property Ecosystem of Connected Cars and its Analysis

Kazuto Kobayashi (Tokyo Institute of Technology)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3921931

Connected Car has attracted a high interest in the automotive industry. V2X is a standard and a core technology of Connected Car. There are many standard essential patents (SEP) in V2X. In addition, OSS is also used in platforms of Connected Cars. To date, there have been many patent infringement lawsuits based on essential patents in the telecommunications industry around the world, and antitrust authorities in various countries have established guidelines to curb such lawsuits. In other words, patent holders are required to promise licenses based on FRAND declarations, and patent licensees are also required to negotiate licenses in good faith. In the connected car business as well, disputes and lawsuits between patent holders and patent implementers over patents related to SEP and others are unfolding, and an IPR ecosystem is being formed through cooperation among companies to deal with these disputes and lawsuits. In this paper, the formation of IPR ecosystems around connected cars and the battles between patentees and licensees in these ecosystems are summarized and explained.

Anti-Suit Injunctions and Jurisdictional Competition In Global FRAND Litigation: The Case For Judicial Restraint

Jorge L. Contreras (University of Utah - S.J. Quinney College of Law)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3899923

The proliferation of international jurisdictional conflicts and competing “anti-suit injunctions” in litigation over the licensing of standards-essential patents has raised concerns among policy makers in the United States, Europe and China. This article suggests that national courts temporarily “stand down” from assessing global “fair, reasonable and nondiscriminatory” (FRAND) royalty rates while international bodies develop a more comprehensive, efficient and transparent methodology for resolving issues around FRAND licensing.

IP & Innovation

Innovation Networks and Business-Stealing

Philippe Aghion (College de France and London School of Economics and Political Science, Fellow; Centre for Economic Policy Research (CEPR); National Bureau of Economic Research (NBER))
Matthew O. Jackson (Stanford University - Department of Economics; Santa Fe Institute)
Antoine Mayerowitz (Paris School of Economics (PSE); College de France, Economics of Innovation Lab)
Abhijit Tagade (London School of Economics & Political Science (LSE) - Department of Economics; Collège de France)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3917979

We use the universe of USPTO data on patents and inventors from 1976 to 2019 to look at the dynamics of coauthorship on patents and its relationship with competition. First, we find an inverted-U relationship between competition and the growth in coauthorship: the number of new collaborators on each patent is maximized at intermediate levels of competition. Next, we find that there is a surge of new coauthors at the time of invention, and then fewer than normal new coauthors after a breakthrough invention. Third, the sizes of the surge and subsequent decline in coauthorship are largest in industries with intermediate levels of competition. We also present a simple model in which researchers trade off gains from collaboration against threats of business stealing, which provides one explanation for our empirical findings.

Flowers of Invention: Patent Protection and Productivity Growth in US Agriculture

Jacob Moscona (Harvard University)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3924439

Patent protection was introduced for plant biotechnology in the United States in 1985, and it affected crops differentially depending on their reproductive structures. Exploiting this unique feature of plant physiology and a new dataset of crop-specific technology development, I find that the introduction of patent rights increased the development of novel plant varieties in affected crops. Technology development was driven by a rapid increase in private sector investment, was accompanied by positive spillover effects on innovation in certain non-biological agricultural technologies, and led to an increase in crop yields. Patent rights, however, could come with potentially significant costs to the consumers of technology and distortions to downstream production. Nevertheless, I document that in US counties that were more exposed to the change in patent law because of their crop composition, land values and

profits increased. Taken together, the results suggest that the prospect of patent protection spurred technological progress and increased downstream productivity and profits.

Social Welfare Gains from Innovation Commons: Theory, Evidence, and Policy Implications

Jason Potts (RMIT University)
Andrew W. Torrance (University of Kansas - School of Law)
Dietmar Harhoff (Max Planck Institute for Innovation and Competition; Ludwig-Maximilians-Universität München; Centre for Economic Policy Research (CEPR))
Eric A. von Hippel (Massachusetts Institute of Technology (MIT) - Sloan School of Management)
Working Paper
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3915997

Innovation commons – which we define as repositories of freely-accessible, “open source” innovation-related information and data - are a very significant resource for innovating and innovation-adopting firms and individuals: Availability of free data and information reduces the innovation-specific private or open investment required to make the next innovative advance. Despite the clear social welfare value of innovation commons under many conditions, academic innovation research and innovation policymaking have to date focused almost entirely on enhancing private incentives to innovate by enabling innovators to keep some types of innovation-related information at least temporarily apart from the commons, via intellectual property rights.

In this paper, our focus is squarely on innovation commons theory, evidence, and policy implications. We first discuss the varying nature of and contents of innovation commons extant today. We summarize what is known about their functioning, their scale, the value they provide to innovators and to general social welfare, and the mechanisms by which this is accomplished. Perhaps somewhat counterintuitively, and with the important exception of major digital platform firms, we find that many who develop innovation-related information at private cost have private economic incentives to contribute their information to innovation commons for free access by free riders. We conclude with a discussion of the value of more general support for innovation commons, and how this could be provided by increased private and public investment in innovation commons “engineering”, and by specific forms of innovation policymaking to increase social welfare via enhancement of innovation commons.

IP Law & Policy

Ten Assumptions About Artificial Intelligence That Can Mislead Patent Law Analysis

Daria Kim (Max Planck Institute for Innovation and Competition)
Maximilian Alber (Aignostics GmbH)
Man Wai Kwok (University of California)
Jelena Mitrovic (University of Passau)
Cristian Ramirez-Atencia (Universidad Politécnica de Madrid)
Jesus Rodriguez Perez (University of Glasgow)
Heiner Zille (Otto von Guericke University Magdeburg)
Max Planck Institute for Innovation & Competition Research Paper No. 21-18
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3910332

The paper examines a set of assumptions about artificial intelligence, particularly machine learning, often taken as factual premises in discussions on the future of patent law in the wake of ‘artificial ingenuity’. The objective is to draw a more realistic and nuanced picture of the human-computer interaction in solving technical problems than where AI systems autonomously generate inventions. A

detailed technical perspective is presented for each assumption, followed by a discussion of specific uncertainties under patent law. Overall, it is argued that none of the posited assumptions on closer examination appears to raise fundamental uncertainty about the appropriateness of the patent system.

The Great Patent Grab

Jonathan Barnett (University of Southern California Gould School of Law)
In The Battle over Patents: History and Politics of Innovation (eds. Stephen H. Haber and Naomi R. Lamoreaux, Oxford University Press 2021)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3909528

From the late 1930s through the 1970s, the U.S. innovation economy operated under a weak property rights regime. Courts and regulators raised obstacles to patent enforcement and expansively interpreted antitrust constraints on patent licensing. This patent-skeptical climate was illustrated by a sequence of antitrust enforcement actions that resulted in the compulsory licensing of the patent portfolios held by some of the largest U.S. firms. Concurrently, the federal government instituted an implicit compulsory licensing regime through the infusion of R&D funding into the private sector, accompanied by legal constraints on firms' control over technology developed using those funds. The U.S. economy exhibited robust innovation for a substantial but limited period, followed by a noticeable slowdown commencing in the mid-1960s as government funding declined. Contrary to expectations, reducing the force of patent protections did not appear to lower entry barriers or enhance competitive conditions. To the contrary: R&D investment was concentrated among a small group of large firms that received extensive government funding, market concentration did not decline, and there was little turnover in market leadership. Additionally, the weak-IP regime may have skewed organizational structures by favoring large firms that had the greatest access to government funding and could monetize R&D investment through integrated production and distribution structures. This weak-IP policy experiment suggests that the current revival of weak-IP policies among U.S. courts, legislators and regulators is likely to advantage, rather than challenge, incumbents in technology markets.

Copyright Law

Software Piracy and IP Management Practices: Strategic Responses to Product-Market Imitation

Wendy A. Bradley (Southern Methodist University (SMU) - Strategy & Entrepreneurship Department)
Julian Kolev (United States Patent and Trademark Office)
USPTO Economic Working Paper No. 2021-3
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3912074

How do firms' IP strategies respond to sudden increases in product-market imitation? Using a 2001 technological shock that enabled rising software piracy, we implement an instrumental-variables estimator to compare a treatment group of at-risk-of-piracy firms with matched not-at-risk control firms. We find that rising piracy increases subsequent R&D spending, copyrights, trademarks, and patents for large, incumbent software firms. Furthermore, copyright and trademark filings precede those of patents, and firms with large patent portfolios disproportionately increase copyrights and trademarks following the shock. We conclude that piracy and similar competitive shocks push firms to innovate to stay ahead of imitator products, and that this effect is moderated by their existing patent portfolios. Our findings have implications for managers seeking to capture value from IP in knowledge-based industries.

Memes on Memes and the New Creativity

Amy Adler (New York University School of Law)
Jeanne C. Fromer (New York University School of Law)
New York University Law Review, Vol. 97, forthcoming 2022
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3911640

Memes are the paradigm of a new, flourishing creativity. Not only are these captioned images one of the most pervasive and important forms of online creativity, but they also upend many of copyright law's fundamental assumptions about creativity, commercialization, and distribution. Chief among them is that copying is harmful. Not only does this mismatch threaten meme culture and expose fundamental problems in copyright law and theory, but the mismatch is even more significant because memes are far from an exceptional case. Indeed, memes are a prototype of a new mode of creativity that is emerging in our contemporary digital era, as can be seen across a range of works. Therefore, the concern with memes signals a much broader problem in copyright law and theory. That is not to say that the traditional creativity that copyright has long sought to protect is dead. Far from it. Both paths of creativity, traditional and new, can be vibrant. Yet we must be sensitive to the misfit between the new creativity and existing copyright law if we want the new creativity to continue to thrive.

Big Data and Copyright Law

Daniel Kiat Boon Seng (National University of Singapore (NUS) - Faculty of Law)
Research Handbook on Big Data Law 2021(edited by Roland Vogl, Executive Director and Lecturer in Law, CodeX - The Stanford Center for Legal Informatics, Stanford Law School)
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3913015

This chapter seeks to provide a state-of-the-art overview of current research in the field of big data analytics as applied to copyright/fair use on the Internet. It examines the reasons for the limited quantitative empirical analysis in the copyright space, explains why the formalities free principle makes it difficult for such research to be done, and suggests several big data analysis methods to collect and analyze copyright-related datasets.

Increased Copyright Flexibilities for User-Generated Creativity

Peter K. Yu (Texas A&M University School of Law)
THE FUTURE OF IP: REFORM PROPOSALS, Gustavo Ghidini and Valeria Falce, eds., Edward Elgar Publishing, 2021, Forthcoming
Texas A&M University School of Law Legal Studies Research Paper No. 21-24
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3916671

The arrival of the Internet, social media and other new communication technologies has presented individuals with an unprecedented ability to create new copyrighted works to benefit society. Moving from consumers to prosumers, these individuals have generated contents such as digitally altered images, music remixes, video mash-ups, synchronized animations, machinimas, parodies and satires, and a dazzling array of fanworks. To unleash the potential provided by this new group of creators, policy makers and commentators have advanced a wide array of proposals to reform copyright law.

This chapter explores how and why copyright law should be reformed to increase flexibilities for user-generated creativity. Based on recent legislative reforms and the Author's personal experience in the copyright reform process, the chapter outlines two distinct but mutually non-exclusive options: (1) the creation of copyright exceptions for user-generated creativity and (2) the limits to statutory or pre-established damages in the non-commercial context. This chapter further examines the benefits and drawbacks of these reform proposals and briefly responds to their most ardent critics.

IP & Trade

Unjustly Vilified TRIPS-Plus?: Intellectual Property Law in Free Trade Agreements

Marketa Trimble (University of Nevada, Las Vegas, William S. Boyd School of Law)
American University Law Review, Vol. 71, No. 4, 2022
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3918052

Intellectual property ("IP") law provisions of free trade agreements ("FTAs") have attracted much criticism. Critics have argued that FTA negotiators, succumbing to the lobbying of various stakeholders, have eliminated or significantly limited many of the flexibilities that multilateral treaties had created, forced stronger IP protection onto developing countries, and fragmented international IP law. While agreeing with a great deal of the criticism expressed by others, this article departs from the typical vilification of FTAs by identifying and analyzing the positive features of FTA IP provisions that are worth replicating and expanding in future FTAs. These positive features include provisions concerning the transparency of IP systems, cooperation among national IP offices, and clarifications of multilateral IP treaties. The processes of FTA negotiations, adoption, and implementation may produce positives as well; FTAs provide opportunities for experimentation at the bilateral and regional level, whose results may usefully inform future multilateral negotiations. Cross-border IP issues, which can benefit from international coordination, can be a focus area in future FTA negotiations.

The Impact of Intellectual Property Protection through FTA on International Trade

Hyunsoo Kim (Korea Institute for International Economic Policy)
Sangjun Yea (Korea Institute for International Economic Policy)
Hyeyoon Keum (Korea Institute for International Economic Policy)
Minji Kang (Korea Institute for International Economic Policy)
KIEP Research Paper, Wolrd Economy Brief 21-34
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3916553#

The importance of intellectual property rights (IPRs) for innovation has grown and the protection of intellectual property in international trade has also been strengthened. AI-related patent applications have been increasing rapidly and many AI patents are being filed in various industries. Intellectual property also represents one of the main controversies of U.S.-China trade relations in the past three decades and remains one of the core issues behind the two countries' recent trade conflicts. As a result, global protection for IPRs has been expanded in recent decades. This article investigates changes in the trend regarding the IP protection level in FTA and how the IP protection through FTAs has affected the composition of aggregate trade flows of member countries in order to provide basic findings necessary to formulate the FTA policies regarding the protection of IPRs in Korea.

Other Topics

Reappraising the Relationship between Intellectual Property Rights and Human Rights: A COVID-19 Pandemic Response

Duncan Matthews (Queen Mary University of London - School of Law)
Queen Mary Law Research Paper No. 366/2021
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3918325

The Covid-19 pandemic, the greatest global health crisis of our times, has highlighted profound inequities in the manufacture and supply of diagnostics, treatments, and vaccines to health care systems worldwide. Crucially, it has revealed structural fault lines in the international intellectual property (IP) architecture. This has strained relations between those who assert that the protection and

enforcement of intellectual property rights (IPRs) are essential components for future investment and innovation, and those who argue that IPRs relevant to healthcare technologies necessary to save lives during the pandemic should be temporarily set aside, with IP-protected health care products available unhindered by the existence of associated IPRs. Against the backdrop of the Covid-19 pandemic response, this paper adopts a human rights approach to reappraise the relationship between IPRs and access to health care technologies. It argues that, while tensions between IPRs as property rights, on the one hand, and the right to health as a human right on the other are not new, a human rights approach to IPRs is an important and valuable conceptual tool as we re-evaluate the IP response to the Covid-19 pandemic. It argues that a human rights approach can enable a fundamental rethinking of the relationship between IP, innovation and access, for the Covid-19 pandemic response and inform debates about future pandemic preparedness.

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